

SEQUENCE LISTING

<110> Gudas, Jean M.  
Haak-Frendscho, Mary  
Foord, Orit  
Liang, Meina L.  
Ahluwalia, Kiran  
Bhakta, Sunil

<120> ANTIBODIES DIRECTED TO MONOCYTE  
CHEMO-ATTRACTANT PROTEIN-1 (MCP-1) AND USES THEREOF

<130> ABGENIX.091A

<150> 60/404,802  
<151> 2002-08-19

<160> 149

<170> FastSEQ for Windows Version 4.0

<210> 1  
<211> 1335  
<212> DNA  
<213> Homosapien

<400> 1  
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tcctgcagg tttccggata caccctact gaattatcca tgcactgggt gcgacaggct 120  
cctggaaatg ggcttgagtg gatgggaggt tttgatcctg aagatggta gacaatctac 180  
gcacagagg tccaggggcag agtcgtcatg accgaggacc catctacaga cacagcctac 240  
atggagctga gcagcctgag atctgaggac acgcccgtgt attactgtgc aaccaacgag 300  
ttttggagtg gttatattga ctactgggc cagggAACCC tggtcaccgt ctccctcagcc 360  
tccaccaagg gcccattcggt cttcccccgt gcgcctgtct ccaggagcac ctccgagagc 420  
acagcggccc tggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcgtgg 480  
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgttctaca gtccctcagga 540  
ctctactccc tcagcagcgt ggtgaccgtg ccctccagca acttcggcac ccagacccatc 600  
acctgcacg tagatcacaa gcccagcaac accaagggtgg acaagacagt tgagcgcaaa 660  
tgttgtgtcg agtgcaccacc gtgcccagca ccacctgtgg caggaccgtc agtcttcctc 720  
ttccccccaa aacccaaggaa caccctcatg atctcccgaa cccctgaggt cactgtcgtg 780  
gtggtgtggacg tgagccacga agaccccgag gtccagttca actggtaacgt ggacggcgtg 840  
gaggtgcata atgccaagac aaagccacgg gaggagcagt tcaacagcac gttccgtgtg 900  
gtcagcgtcc tcaccgttgcgt gcaccaggac tggctgaacg gcaaggagta caagtgcac 960  
gtctccaaca aaggccccc agccccatc gagaaaaacca tctccaaaac caaagggcag 1020  
ccccgagaac cacaggtgtc caccctgccc ccatccccggg aggagatgac caagaaccag 1080  
gtcagcctga cctgcctgtt ccaaaggcttc taccccgacg acatcgccgt ggagtggag 1140  
agcaatgggc agccggagaa caactacaag accacacctc ccatgctgga ctccgacggc 1200  
tccttcttcc tctacagcaa gtcaccgtg gacaagagca ggtggcagca gggaaacgtc 1260  
ttctcatgtc ccgtgatgca tgaggctctg cacaaccact acacgcagaa gagcctctcc 1320  
ctgtctccgg gtaaa 1335

<210> 2  
<211> 445

<212> PRT

<213> Homosapien

<400> 2

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Asn Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Arg Phe  
50 55 60  
Gln Gly Arg Val Val Met Thr Glu Asp Pro Ser Thr Asp Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Thr Asn Glu Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly  
100 105 110  
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
130 135 140  
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
145 150 155 160  
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
165 170 175  
Gln Ser Ser Gly Leu Tyr Ser Leu Ser Val Val Thr Val Pro Ser  
180 185 190  
Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys Pro  
195 200 205  
Ser Asn Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu  
210 215 220  
Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu  
225 230 235 240  
Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu  
245 250 255  
Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln  
260 265 270  
Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys  
275 280 285  
Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu  
290 295 300  
Thr Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys  
305 310 315 320  
Val Ser Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys  
325 330 335  
Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser  
340 345 350  
Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys  
355 360 365  
Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln  
370 375 380  
Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly  
385 390 395 400  
Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln

405	410	415
Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn		
420	425	430
His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys		
435	440	445

<210> 3  
<211> 660  
<212> DNA  
<213> Homosapien

<400> 3  
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atcaactgta agtccagcca gagtgtttta tacagctcca acaataagaa ctacttagtt 120  
tggtaccagc agaaaccagg acagcctcct aaactgctca tttactggc atctatccgg 180  
gaatccgggg tccctgaccg attcagttcc agccggctcg agacagattt cactctcacc 240  
atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttttagtagt 300  
ccgtggacgt tcggccaagg gaccaaggtg gaaatcaaac gaactgtggc tgaccatct 360  
gtcttcatct tcccgccatc tgatgagcag ttgaaaatctg gaactgcctc tgggtgtgc 420  
ctgctgaata acttctatcc cagagagcc aaagtacagt ggaaggtgga taacgccctc 480  
caatcgggta actcccagga gagtgtcaca gagcaggaca gcaaggacag cacctacagc 540  
ctcagcagca ccctgacgct gagcaaagca gactacgaga aacacaaagt ctacgcctgc 600  
gaagtcaccc atcagggcct gagctcgccc gtacacaaaga gcttcaacag gggagagtgt 660

<210> 4  
<211> 220  
<212> PRT  
<213> Homosapien

<400> 4  
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Met Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
20 25 30  
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln  
35 40 45  
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Ile Arg Glu Ser Gly Val  
50 55 60  
Pro Asp Arg Phe Ser Ser Gly Ser Glu Thr Asp Phe Thr Leu Thr  
65 70 75 80  
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
85 90 95  
Tyr Phe Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
100 105 110  
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
115 120 125  
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
130 135 140  
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu  
145 150 155 160  
Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp  
165 170 175  
Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr

180	185	190
Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser		
195	200	205
Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys		
210	215	220

<210> 5  
 <211> 475  
 <212> DNA  
 <213> Homosapien

<400> 5  
 caggtccagc tggcacagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
 tcctgcagg tttccggata caccctact gaattatcca tgcactgggt gcacaggct 120  
 cctggaaaag ggcttgagtg gatggggaggt tttgatcctg aagatggtga aacaatctac 180  
 gcacagaagt tccaggcag agtcaccatg accgaggaca catctacaga cacagcctac 240  
 atggagctga gcagcctgag atctgaggac acggccgtgt attattgtgc aaccaacgaa 300  
 ttttggagtg gttatgttga ctactgggc cagggAACCC tggtcaccgt ctccctcagcc 360  
 tccaccaagg gcccattcggt ctccccctg gcgcctgtgt ccaggagcac tacttcccc 420  
 ggcgtgcaca cttcccccagc tggcctacag tcctcaggac tctactccct cagca 475

<210> 6  
 <211> 158  
 <212> PRT  
 <213> Homosapien

<400> 6  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
 20 25 30  
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Thr Asn Glu Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly  
 100 105 110  
 Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
 115 120 125  
 Pro Leu Ala Pro Cys Ser Arg Ser Thr Thr Ser Pro Gly Val His Thr  
 130 135 140  
 Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser  
 145 150 155

<210> 7  
 <211> 477  
 <212> DNA  
 <213> Homosapien

<400> 7  
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atcaattgca agtcagcca gagtgttta tatagctcca acaataagaa ctacttagtt 120  
tggtaccagc agaaaacttagg acagccccct aagctgctca tttactggc atctaccgg 180  
gaatccgggg tccctgaccg attcagtgcc agcgggtctg ggacagattt cactctcacc 240  
atcagcagcc tgcaggctga agatgtggc gtttattact gtcaacaata ttatcgtagt 300  
ccgtggacgt tcggccaagg gaccaaggtg gaaatcaaac gaactgtggc tgaccatct 360  
gtcttcatct tcccgcacatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420  
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgcc 477

<210> 8  
<211> 159  
<212> PRT  
<213> Homosapien

<400> 8  
Asp Ile Val Met Thr Gln Ser Pro Ala Ser Leu Ala Glu Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
20 25 30  
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Leu Gly Gln  
35 40 45  
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val  
50 55 60  
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
65 70 75 80  
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
85 90 95  
Tyr Tyr Arg Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
100 105 110  
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
115 120 125  
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
130 135 140  
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala  
145 150 155

<210> 9  
<211> 556  
<212> PRT  
<213> Homosapien

<400> 9  
Cys Ala Gly Gly Thr Cys Cys Ala Gly Cys Thr Gly Gly Thr Ala Cys  
1 5 10 15  
Ala Gly Thr Cys Thr Gly Gly Gly Cys Thr Gly Ala Gly Gly Thr  
20 25 30  
Gly Ala Ala Gly Ala Ala Gly Cys Cys Thr Gly Gly Gly Cys Cys  
35 40 45  
Thr Cys Ala Gly Thr Gly Ala Ala Gly Gly Thr Cys Thr Cys Cys Thr  
50 55 60  
Gly Cys Ala Ala Gly Gly Thr Thr Cys Cys Gly Gly Ala Thr Ala  
65 70 75 80  
Cys Ala Cys Cys Cys Thr Cys Ala Cys Thr Gly Ala Ala Thr Thr Ala

85	90	95
Thr Cys Cys Ala Thr Gly Cys Ala Cys	Thr Gly Gly Gly Thr Gly Cys	
100	105	110
Gly Ala Cys Ala Gly Gly Cys	Thr Cys Cys Thr Gly Gly Ala Ala Ala	
115	120	125
Ala Gly Gly Gly Cys Thr Thr Gly Ala Gly Thr Gly Gly Ala Thr Gly		
130	135	140
Gly Gly Ala Gly Gly Thr Thr Thr Gly Ala Thr Cys Cys Thr Gly		
145	150	155
Ala Ala Gly Ala Thr Gly Gly Thr Gly Ala Ala Ala Cys Ala Ala Thr		
165	170	175
Cys Thr Ala Cys Gly Cys Ala Cys Ala Gly Ala Ala Gly Thr Thr Cys		
180	185	190
Cys Ala Gly Gly Gly Cys Ala Gly Ala Gly Thr Cys Ala Cys Cys Ala		
195	200	205
Thr Gly Ala Cys Cys Gly Ala Gly Gly Ala Cys Ala Cys Ala Thr Cys		
210	215	220
Thr Ala Cys Ala Gly Ala Cys Ala Cys Ala Gly Cys Cys Thr Ala Cys		
225	230	235
Ala Thr Gly Gly Ala Gly Cys Thr Gly Ala Gly Cys Ala Gly Cys Cys		
245	250	255
Thr Gly Ala Gly Ala Thr Cys Thr Gly Ala Gly Gly Ala Cys Ala Cys		
260	265	270
Gly Gly Cys Cys Gly Thr Gly Thr Ala Thr Thr Ala Cys Thr Gly Thr		
275	280	285
Gly Cys Ala Ala Cys Ala Ala Ala Cys Gly Ala Thr Thr Thr Thr Thr		
290	295	300
Gly Gly Ala Gly Thr Gly Gly Thr Ala Thr Thr Ala Thr Ala Ala		
305	310	315
Cys Thr Ala Cys Thr Gly Gly Gly Cys Cys Ala Gly Gly Ala		
325	330	335
Ala Cys Cys Cys Thr Gly Gly Thr Cys Ala Cys Cys Gly Thr Cys Thr		
340	345	350
Cys Cys Thr Cys Ala Gly Cys Cys Thr Cys Cys Ala Cys Cys Ala Ala		
355	360	365
Gly Gly Gly Cys Cys Cys Ala Thr Cys Gly Gly Thr Cys Thr Thr Cys		
370	375	380
Cys Cys Cys Cys Thr Gly Gly Cys Cys Cys Cys Thr Gly Cys Thr		
385	390	395
Cys Cys Ala Gly Gly Ala Gly Cys Ala Cys Cys Thr Cys Cys Gly Ala		
405	410	415
Gly Ala Gly Cys Ala Cys Ala Gly Cys Gly Gly Cys Cys Cys Thr Gly		
420	425	430
Gly Gly Cys Thr Gly Cys Cys Thr Gly Gly Thr Cys Ala Ala Gly Gly		
435	440	445
Ala Cys Thr Ala Cys Thr Thr Cys Cys Cys Gly Ala Ala Cys Cys		
450	455	460
Gly Gly Thr Gly Ala Cys Gly Gly Thr Gly Thr Cys Gly Thr Gly Gly		
465	470	475
Ala Ala Cys Thr Cys Ala Gly Gly Cys Gly Cys Thr Cys Thr Gly Ala		
485	490	495
Cys Cys Ala Gly Cys Gly Gly Cys Gly Thr Gly Cys Ala Cys Ala Cys		
500	505	510
Cys Thr Thr Cys Cys Cys Ala Gly Cys Thr Gly Thr Cys Cys Thr Ala		
515	520	525

Cys	Ala	Gly	Thr	Cys	Cys	Thr	Cys	Ala	Gly	Gly	Ala	Cys	Thr	Cys	Thr
530		535						540							
Ala	Cys	Thr	Cys	Cys	Thr	Cys	Ala	Gly	Cys	Ala					
545			550				555								

<210> 10  
<211> 185  
<212> PRT  
<213> Homosapien

<400> 10															
Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Ala
1		5						10					15		
Ser	Val	Lys	Val	Ser	Cys	Lys	Val	Ser	Gly	Tyr	Thr	Leu	Thr	Glu	Leu
		20					25					30			
Ser	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Met
	35				40						45				
Gly	Gly	Phe	Asp	Pro	Glu	Asp	Gly	Glu	Thr	Ile	Tyr	Ala	Gln	Lys	Phe
	50				55					60					
Gln	Gly	Arg	Val	Thr	Met	Thr	Glu	Asp	Thr	Ser	Thr	Asp	Thr	Ala	Tyr
65			70				75					80			
Met	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
	85					90					95				
Ala	Thr	Asn	Asp	Phe	Trp	Ser	Gly	Tyr	Tyr	Asn	Tyr	Trp	Gly	Gln	Gly
	100					105					110				
Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe
	115					120					125				
Pro	Leu	Ala	Pro	Cys	Ser	Arg	Ser	Thr	Ser	Glu	Ser	Thr	Ala	Ala	Leu
	130					135					140				
Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp
145				150				155					160		
Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu
					165			170					175		
Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser							
				180			185								

<210> 11  
<211> 490  
<212> DNA  
<213> Homosapien

<400> 11															
gacatcgta	tgacccagtc	tccagactcc	ctggctgtgt	ctctgggcga	gagggccacc	60									
atcaactgca	agtccagcca	gagtgtttta	tacagctcca	acaataagaa	ctacttagtt	120									
tggtaccaac	agaaaccagg	acagcctcct	aaactgctca	tttactgggc	atctatccgg	180									
gaatccgggg	tccctgaccg	attcagtgcc	agcgggtctg	ggacagattt	cactctcacc	240									
atcaacagcc	tgcaggctga	agatgtggca	gttattact	gtcagcagta	tttttatagt	300									
ccgtggacgt	tcggccaagg	gaccaaggtg	gaaatcaaac	gaactgtggc	tgcaccatct	360									
gtcttcatct	tcccgcctac	tcatgagcag	ttgaaatctg	gaactgcctc	tgttgtgc	420									
ctgctgaata	acttctatcc	cagagaggcc	aaagtacagt	ggaagggtgga	taacgcctc	480									
caatcggtta						490									

<210> 12

<211> 163  
<212> PRT  
<213> Homosapien

<400> 12  
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
20 25 30  
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln  
35 40 45  
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Ile Arg Glu Ser Gly Val  
50 55 60  
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
65 70 75 80  
Ile Asn Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
85 90 95  
Tyr Phe Tyr Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
100 105 110  
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
115 120 125  
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
130 135 140  
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu  
145 150 155 160  
Gln Ser Gly

<210> 13  
<211> 543  
<212> DNA  
<213> Homosapien

<400> 13  
caggtccagc tggcacatc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcagg tttccggaca caccctact gaattatcca tgcactgggt ggcacaggct 120  
cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatgtga aacaatctac 180  
gcacagaagt tccaggacag agtcaccatg accgaggaca catctacaga cacagcctac 240  
atggagctga gcagccctaaatctgaggac acggccgtgt attactgtgc aaccaacgt 300  
ttttggagtg gttatatttga ctgctggggc cagggAACCC tggtcaccgt ctccctagcc 360  
tccaccaagg gccccatcggt ctccccctg gcccctgtt ccaggagcac ctcccgagagc 420  
acagcggccc tgggctgcct ggtcaaggac tactccccg aaccgggtgac ggtgtcgtgg 480  
aactcaggcg ctctgaccag cggcgtgcac accttcccgat ctgtcctaca gtcctcagga 540  
ctt 543

<210> 14  
<211> 181  
<212> PRT  
<213> Homosapien

<400> 14  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly His Thr Leu Thr Glu Leu

20	25	30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met		
35	40	45
Gly Gly Phe Asp Pro Glu Asp Asp Glu Thr Ile Tyr Ala Gln Lys Phe		
50	55	60
Gln Asp Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr		
65	70	75
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys		
85	90	95
Ala Thr Asn Asp Phe Trp Ser Gly Tyr Phe Asp Cys Trp Gly Gln Gly		
100	105	110
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe		
115	120	125
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu		
130	135	140
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp		
145	150	155
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu		
165	170	175
Gln Ser Ser Gly Leu		
180		

<210> 15  
 <211> 490  
 <212> DNA  
 <213> Homosapien

<400> 15  
 gacatcggtgc tgaccaggc tccagactcc ctggctgtgt gtctggcga gaggccacc 60  
 atcaactgca agtccagcca gagtgttta tatagtccca acaataagaa cttcttagtt 120  
 tggtaccaggc agagaccagg acagccctt aagctgctca tttactggc atctaccgg 180  
 gaatccgggg tccctgaccg attcagtgcc agccggctcg ggacagattt cactctcacc 240  
 atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttatagtagt 300  
 ccgtggacgt tcggccaagg gaccaagggtg gaaatcaaac gaaactgtggc tgaccatct 360  
 gtcttcatct tcccgccatc tgatgagcag ttgaaatctg gaaactgcctc tggtgtgtgc 420  
 ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgccctc 480  
 caatcggtt 490

<210> 16  
 <211> 163  
 <212> PRT  
 <213> Homosapien

<400> 16  
 Asp Ile Val Leu Thr Gln Ser Pro Asp Ser Leu Ala Val Cys Leu Gly  
 1 5 10 15  
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
 20 25 30  
 Pro Asn Asn Lys Asn Phe Leu Val Trp Tyr Gln Gln Arg Pro Gly Gln  
 35 40 45  
 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val  
 50 55 60  
 Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
 65 70 75 80

Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
 85 90 95  
 Tyr Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
 100 105 110  
 Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
 115 120 125  
 Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
 130 135 140  
 Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu  
 145 150 155 160  
 Gln Ser Gly

<210> 17  
 <211> 1335  
 <212> DNA  
 <213> Homosapien

<400> 17  
 caggtccagc tggcacagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
 tcctgcaagg tttccggata caccctcaact gaattatcca tgcactgggt gcgacaggct 120  
 cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatgtga aacaatctac 180  
 gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagtctac 240  
 atggagctga gcagcctgag atctgaggac acgccccatgt attactgtgc aacacgggg 300  
 ttttggactg gttatttga ccactggggc cagggAACCC tggtcaccgt ctccctcagcc 360  
 tccaccaagg gcccattcggt ctccccctg gcgcctgtct ccaggagcac ctcccgagac 420  
 acagcggccc tgggtgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcggtgg 480  
 aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtccctcagga 540  
 ctctactccc tcagcagcgt ggtgaccgtg ccctccagca acttcggcac ccagacctac 600  
 acctgcaacg tagatcacaa gcccagcaac accaagggtgg acaagacagt tgagcgc 660  
 tggtgtgtcg agtgcaccacc gtgcccagca ccacctgtgg caggaccgtc agtcttcctc 720  
 ttccccccaa aacccaagga caccctcatg atctcccgga cccctgaggt cacgtcg 780  
 gtgggtggacg tgagccacga agaccccggag gtccagttca actggtaacgt ggacggcg 840  
 gaggtgcata atgccaagac aaagccacgg gaggagcagt tcaacagcac gtccgtgtg 900  
 gtcagcgtcc tcaccgttgt gcaccaggac tggctgaacg gcaaggagta caagtgc 960  
 gtctccaaca aaggcctccc agccccatc gagaaaacca tctccaaaac caaaggccag 1020  
 ccccggagaac cacaggtgtc caccctgccc ccattccggg aggagatgac caagaaccag 1080  
 gtcagcgtcc cctgccttgtt caaaggcttc tacccagcg acatcggctg ggagtgggag 1140  
 agcaatgggc agccggagaa caactacaag accacacctc ccatgctgga ctccgacggc 1200  
 tccttcttcc tctacagcaa gtcaccgtg gacaagagca ggtggcagca ggggaacgtc 1260  
 ttctctatgtc ccgtgatgca tgaggcttg cacaaccact acacgcagaa gagcctctcc 1320  
 ctgtctccgg gtaaa 1335

<210> 18  
 <211> 445  
 <212> PRT  
 <213> Homosapien

<400> 18  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
 20 25 30  
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met

35	40	45													
Gly	Gly	Phe	Asp	Pro	Glu	Asp	Gly	Glu	Thr	Ile	Tyr	Ala	Gln	Lys	Phe
50					55					60					
Gln	Gly	Arg	Val	Thr	Met	Thr	Glu	Asp	Thr	Ser	Thr	Asp	Thr	Val	Tyr
65					70					75					80
Met	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Met	Tyr	Tyr	Cys
					85					90					95
Ala	Thr	Arg	Glu	Phe	Trp	Thr	Gly	Tyr	Phe	Asp	His	Trp	Gly	Gln	Gly
					100					105					110
Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe
					115					120					125
Pro	Leu	Ala	Pro	Cys	Ser	Arg	Ser	Thr	Ser	Glu	Ser	Thr	Ala	Ala	Leu
					130					135					140
Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp
145					150					155					160
Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu
					165					170					175
Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser
					180					185					190
Ser	Asn	Phe	Gly	Thr	Gln	Thr	Tyr	Thr	Cys	Asn	Val	Asp	His	Lys	Pro
					195					200					205
Ser	Asn	Thr	Lys	Val	Asp	Lys	Thr	Val	Glu	Arg	Lys	Cys	Cys	Val	Glu
					210					215					220
Cys	Pro	Pro	Cys	Pro	Ala	Pro	Pro	Val	Ala	Gly	Pro	Ser	Val	Phe	Leu
225					230					235					240
Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu
					245					250					255
Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Gln
					260					265					270
Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys
					275					280					285
Pro	Arg	Glu	Glu	Gln	Phe	Asn	Ser	Thr	Phe	Arg	Val	Val	Ser	Val	Leu
					290					295					300
Thr	Val	Val	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys
305					310					315					320
Val	Ser	Asn	Lys	Gly	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys
					325					330					335
Thr	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser
					340					345					350
Arg	Glu	Glu	Met	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys
					355					360					365
Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln
					370					375					380
Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Met	Leu	Asp	Ser	Asp	Gly
385					390					395					400
Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln
					405					410					415
Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His	Asn
					420					425					430
His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly	Lys			
					435					440					445

<210> 19

<211> 660

<212> DNA  
<213> Homosapien

<400> 19  
gacatcgtga tgaccaggc tccagactcc ctggctgtgt ctctggcga gaggccacc 60  
atcaactgca agtccagcca gagtgttta tacagctcca acaataagaa ctacttagtt 120  
tggtatcagc agaaaaccagg acagcctcct aaactgctca ttactggc atctatccgg 180  
gaatccgggg tcccgaccc attcagtgcc agccggctcg ggacagattt cactctcacc 240  
atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttatagttact 300  
ccgctcactt tcggcggagg gaccaagggtg gagatcaaac gaaactgtggc tgaccatct 360  
gtcttcatct tcccgccatc tgatgacccag ttgaaatctg gaaactgcctc tggtgtgtgc 420  
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaaggtgga taacgcctc 480  
caatcgggta actcccaaggaa gagtgtcaca gagcaggaca gcaaggacag cacctacagc 540  
ctcagcagca ccctgacgct gagcaaaagca gactacgaga aacacaaagt ctacgcctgc 600  
gaagtcaccc atcagggcct gagctcgccc gtcacaaaga gcttcaacag gggagagtgt 660

<210> 20  
<211> 220  
<212> PRT  
<213> Homosapien

<400> 20  
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
20 25 30  
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln  
35 40 45  
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Ile Arg Glu Ser Gly Val  
50 55 60  
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
65 70 75 80  
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
85 90 95  
Tyr Tyr Ser Thr Pro Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile  
100 105 110  
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
115 120 125  
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
130 135 140  
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu  
145 150 155 160  
Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp  
165 170 175  
Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr  
180 185 190  
Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser  
195 200 205  
Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys  
210 215 220

<210> 21  
<211> 543

<212> DNA  
<213> Homosapien

<400> 21  
caggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg tttccggata cactttact gaattatcca tgcactgggt gcgacaggct 120  
cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatggtga aacaagctac 180  
gcacagaagt tccggggcag agtcaccatg accgaggaca catctacaga cacagccac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aaccaacgat 300  
ttttggagtg gttatgttga ctattgggc cagggAACCC tggtcaccgt ctccctcagcc 360  
tccaccaagg gcccattcggt ctccccctg gcccctgct ccaggagcac ctccgagagc 420  
acagcggccc tgggctgcct ggtcaaggac tactccccg aaccggtgac ggtgtcgtgg 480  
aactcaggcg ctctgaccag cggcgtgcac accttccag ctgtcctaca gtcctcagga 540  
ctt 543

<210> 22  
<211> 181  
<212> PRT  
<213> Homosapien

<400> 22  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Phe Thr Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ser Tyr Ala Gln Lys Phe  
50 55 60  
Arg Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala His  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Thr Asn Asp Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly  
100 105 110  
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
130 135 140  
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
145 150 155 160  
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
165 170 175  
Gln Ser Ser Gly Leu  
180

<210> 23  
<211> 460  
<212> DNA  
<213> Homosapien

<400> 23  
gacatccaga tgaccaggatc tccatcttcc gtgtctgcat ctgttaggaga cagagtcacc 60  
atcacttgc gggcgagtca gggattgac atctacttag cctggatca gcagaaacca 120

gggaaagccc ctaagctcct gatcaatgct gcatccagg ttgacaaacgg ggtcccctca 180  
aggttcggcg gcagtggatc tgggacagat ttcaactctca ccatcagcgg cctgcagcct 240  
gaagattttg caacttacta ttgtcaactg acttactttt tcccggtggac gttcgccaa 300  
gggaccaagg tggaaatcaa acgaaactgtg gctgcaccat ctgtcttcat ctccccgcca 360  
tctgatgagc agttgaaatc tggaaactgccc tctgttgtgt gcctgctgaa taacttctat 420  
cccagagagg ccaaagtaca gtggaaagggtg gataacgccc 460

<210> 24  
<211> 153  
<212> PRT  
<213> Homosapien

<400> 24  
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly  
1 5 10 15  
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Asp Ile Tyr  
20 25 30  
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile  
35 40 45  
Asn Ala Ala Ser Ser Leu Gln Asn Gly Val Pro Ser Arg Phe Gly Gly  
50 55 60  
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Gly Leu Gln Pro  
65 70 75 80  
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Leu Thr Tyr Phe Phe Pro Trp  
85 90 95  
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala  
100 105 110  
Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly  
115 120 125  
Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala  
130 135 140  
Lys Val Gln Trp Lys Val Asp Asn Ala  
145 150

<210> 25  
<211> 543  
<212> DNA  
<213> Homosapien

<400> 25  
caggtccagc tggcacatc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg tttccggata caccctact gaattatcca tgcactgggt gcgacgaatt 120  
cctggaaaag ggcttgagtg gatgggaggt tttgaccctg aagatggta aacaatctac 180  
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacaaacgat 300  
ttttggagtg gctattgggg ccactggggc cagggAACCC tggtcaccgt ctccctcagcc 360  
tccaccaagg gcccattcggt cttccccctg gcgcctgtct ccaggagcac ctccgagagc 420  
acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcgtgg 480  
aactcaggcgc ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga 540  
ctt 543

<210> 26  
<211> 181  
<212> PRT

<213> Homosapien

<400> 26

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Arg Ile Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Thr Asn Asp Phe Trp Ser Gly Tyr Trp Gly His Trp Gly Gln Gly  
100 105 110  
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
130 135 140  
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
145 150 155 160  
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
165 170 175  
Gln Ser Ser Gly Leu  
180

<210> 27

<211> 459

<212> DNA

<213> Homosapien

<400> 27

gacatcgtga tgaccaggc tccagactcc ctggctgtgt ctctggcgaa gagggccacc 60  
atcaactgca agtccagccaa gagtgttttacagctccaa acaataagaa ctacctagct 120  
tggcaccaag ctgctcattt actggacata tatccggaa tccgggtcc ctgaccgatt 180  
cagttggcaggc gggctctggaa cagatttcac tctcaccatc agcagcctgc aggctgaaga 240  
tgtggcagtt tattactgtc aggaacattha tagtattccg tggacgttcg gccaaggggac 300  
caaggtggaa atcaaacgaa ctgtggctgc accatctgtc ttcatctcc cgccatctga 360  
tgagcagttg aactgcctct gttgtgtgcc tgctgaataa cttctatccc agagaggcca 420  
aagtacagtg gaaggtggat aacgcccctcc aatcgggtaa 459

<210> 28

<211> 149

<212> PRT

<213> Homosapien

<400> 28

Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
20 25 30  
Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Leu Leu Ile Tyr Trp Thr

35	40	45	
Tyr Ile Arg Glu Ser Gly Val Pro Asp Arg Phe Ser Gly Ser			
50	55	60	
Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val			
65	70	75	80
Ala Val Tyr Tyr Cys Gln Glu His Tyr Ser Ile Pro Trp Thr Phe Gly			
85	90	95	
Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala Pro Ser Val			
100	105	110	
Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Asn Cys Leu Cys Cys Val			
115	120	125	
Pro Ala Glu Leu Leu Ser Gln Arg Gly Gln Ser Thr Val Glu Gly Gly			
130	135	140	
Arg Pro Pro Ile Gly			
145			

<210> 29  
<211> 524  
<212> DNA  
<213> Homosapien

<400> 29  
caggtccagc tggcacagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcagg tttccggata caccctact gaattatcca tgcactgggt gcgacaggct 120  
cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatgatga aacaatctac 180  
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacggcctac 240  
atggagctga gcagccctgag atctgaggac acggccgtgt atttctgtgc aaccaacgat 300  
ttttggagtg gttatattga ctgctggac cagggAACCC tggtcaccgt ctccctcagcc 360  
tccaccaagg gcccattcggt ctccccctg gcgcctcgct ccaggaacac ctccgagagc 420  
acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg 480  
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgt 524

<210> 30  
<211> 174  
<212> PRT  
<213> Homosapien

<400> 30  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Asp Glu Thr Ile Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys  
85 90 95  
Ala Thr Asn Asp Phe Trp Ser Gly Tyr Phe Asp Cys Trp Asp Gln Gly  
100 105 110  
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125

Pro	Leu	Ala	Pro	Cys	Ser	Arg	Asn	Thr	Ser	Glu	Ser	Thr	Ala	Ala	Leu
130															140
Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp
145															160
Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala		
														165	170

<210> 31  
<211> 490  
<212> DNA  
<213> Homosapien

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<400> 31
gacatcgta tgacccagtc tccagactcc ctggctgcgt ctctggcga gagggccacc 60
atcaactgca agtccagtca gagtgttta tacaggtcca acaataagaa ttatTTtagtt 120
tggtaccagg aaaaaccagg acagcctcct aagctgtca tttactggc atctatccgg 180
gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240
atcagcagcc tgcaggctga agatgtggca gtttattttct gtcagcaata ttatagttct 300
ccgtggacgt ttggccaagg gaccaagggt gaaatcaaac gaactgtggc tgcaccatct 360
gtcttcatct tcccgcacatc tgatgagcag ttgaaatctg gaactgcctc tgTTgtgtgc 420
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgcctc 480
caatcggtt 490
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<210> 32  
<211> 163  
<212> PRT  
<213> Homosapien

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<400> 32
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Ala Ser Leu Gly
 1           5           10           15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Arg
 20          25          30
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln
 35          40          45
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Ile Arg Glu Ser Gly Val
 50          55          60
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65          70          75          80
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Phe Cys Gln Gln
 85          90          95
Tyr Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
 100         105         110
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
 115         120         125
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
 130         135         140
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
 145         150         155         160
Gln Ser Gly

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<210> 33

<211> 545  
<212> DNA  
<213> Homosapien

<400> 33

caggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg tttccggata caccctcaact gaattatcca tgcactgggt gcgacaggct 120  
cctggaaaag ggcttgagtg gatggggaggt tttgatcctg aagatggtga aacaatctac 180  
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacctggtat 300  
agtggatct acttagctt tgatatctgg ggccaaggga caatggtcac cgtctttca 360  
gcctccacca agggccatc ggtctcccc ctggcgcct gctccaggag cacctccgag 420  
agcacagcgg ccctgggctg cctggtaag gactacttcc ccgaaccggt gacgggtcg 480  
tggactcag ggcgtctgac cagcggcgtg cacaccttcc cagctgtcct acagtccctca 540  
ggatt 545

<210> 34

<211> 181  
<212> PRT  
<213> Homosapien

<400> 34

Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Ala
1				5					10				15		
Ser	Val	Lys	Val	Ser	Cys	Lys	Val	Ser	Gly	Tyr	Thr	Leu	Thr	Glu	Leu
					20				25				30		
Ser	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Met
					35			40				45			
Gly	Gly	Phe	Asp	Pro	Glu	Asp	Gly	Glu	Thr	Ile	Tyr	Ala	Gln	Lys	Phe
					50			55			60				
Gln	Gly	Arg	Val	Thr	Met	Thr	Glu	Asp	Thr	Ser	Thr	Asp	Thr	Ala	Tyr
					65			70			75			80	
Met	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
					85			90				95			
Ala	Thr	Trp	Tyr	Ser	Gly	Ile	Tyr	Leu	Ala	Phe	Asp	Ile	Trp	Gly	Gln
					100			105				110			
Gly	Thr	Met	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val
					115			120			125				
Phe	Pro	Leu	Ala	Pro	Cys	Ser	Arg	Ser	Thr	Ser	Glu	Ser	Thr	Ala	Ala
					130			135			140				
Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser
					145			150			155			160	
Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val
					165			170			175				
Leu	Gln	Ser	Ser	Gly											
					180										

<210> 35

<211> 472  
<212> DNA  
<213> Homosapien

<400> 35

gaaattgtgc tgactcagtc tccagacttt cagtcgtga ctccaaagga gaaagtccacc 60

atcacctgcc gggccagtca gagcatttgt agtagcttac actggatcca gcagaaacca 120  
gatcagtctc caaagctctt catcaagat gcttcccagt cttctcagg ggtcccctcg 180  
aggttcagtgc agtggatc tggacatg ttcaccctca ccatcaatag ccttggaaatc 240  
gaagatgctg caacgttata ctgtcatcg agtagtagtt tacctcacac ttccggcgga 300  
gggaccaagg tggagatcaa acgaactgtg gctgcaccat ctgtcttcat cttcccgcca 360  
tctgatgagc agttgaaatc tggaaactgtc tcttgtgtgc gcctgctgaa taacttctat 420  
cccagagagg ccaaagtaca gtggaaagggtg gataacgccc tccaaatcgaa ta 472

<210> 36  
<211> 157  
<212> PRT  
<213> Homosapien

<400> 36  
Glu Ile Val Leu Thr Gln Ser Pro Asp Phe Gln Ser Val Thr Pro Lys  
1 5 10 15  
Glu Lys Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Gly Ser Ser  
20 25 30  
Leu His Trp Tyr Gln Gln Lys Pro Asp Gln Ser Pro Lys Leu Leu Ile  
35 40 45  
Lys Tyr Ala Ser Gln Ser Phe Ser Gly Val Pro Ser Arg Phe Ser Gly  
50 55 60  
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Asn Ser Leu Glu Ala  
65 70 75 80  
Glu Asp Ala Ala Thr Tyr Tyr Cys His Gln Ser Ser Ser Leu Pro His  
85 90 95  
Thr Phe Gly Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala  
100 105 110  
Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly  
115 120 125  
Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala  
130 135 140  
Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly  
145 150 155

<210> 37  
<211> 1335  
<212> DNA  
<213> Homosapien

<400> 37  
caggtccagt tggcacatc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg tttccggata caccctactt gaattatcca tgcactgggt ggcacaggct 120  
cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatggtga aacaatctac 180  
gcacagaagt tccagggcag agtcagtatg accgaggaca catccacaga cacagcctac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt atttctgtgc aaccaacgaa 300  
ttttggagtg gttatatttga ctactggggc cagggaaaccc tggtcaccgt ctccctcagcc 360  
tccaccaagg gcccattcggt ctccccctg gcccctgtt ccaggagcac ctcccgagac 420  
acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcggtgg 480  
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga 540  
ctctactccc tcagcagcgt ggtgaccgtg ccctccagca acttcggcac ccagacctac 600  
acctgcaacg tagatcacaa gcccagcaac accaagggtgg acaagacagt tgagcgaaa 660  
tgggtgtcg agtggccacc gtggccagca ccacctgtgg caggaccgtc agtcttcctc 720  
ttccccccaa aacccaagga caccctcatg atctcccgaa cccctgaggt cacgtgcgtg 780

gtggggacg tgagccacga agaccccgag gtccagttca actggtagt ggacggcgtg 840  
 gaggtgcata atgccaagac aaagccacgg gagagcagt tcaacagcac gttccgtgtg 900  
 gtcagcgtcc tcaccgtgt gcaccaggac tggctgaacg gcaaggagta caagtgcag 960  
 gtctccaaca aaggcctccc agccccatc gagaaaacca tctccaaaac caaaggccag 1020  
 ccccgagaac cacaggtgt a caccctgccc ccatcccgagg agagatgac caagaaccag 1080  
 gtcagcctga cctgcctgtt caaaggcttc taccggcagcg acatgcccgt ggagtggag 1140  
 agcaatgggc agccggagaa caactacaag accacaccc tcacgtgtt ctcgcacggc 1200  
 tccttcttcc tctacagcaa gtcaccgtg gacaagagca ggtggcagca gggaaacgtc 1260  
 ttctcatgtt ccgtgatgtca tgaggctctg cacaaccact acacgcagaa gagcctctcc 1320  
 ctgtctccgg gtaaa 1335

<210> 38  
 <211> 445  
 <212> PRT  
 <213> Homosapien

<400> 38  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
 20 25 30  
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Ser Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys  
 85 90 95  
 Ala Thr Asn Glu Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly  
 100 105 110  
 Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
 115 120 125  
 Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
 130 135 140  
 Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
 145 150 155 160  
 Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
 165 170 175  
 Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser  
 180 185 190  
 Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys Pro  
 195 200 205  
 Ser Asn Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu  
 210 215 220  
 Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu  
 225 230 235 240  
 Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu  
 245 250 255  
 Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln  
 260 265 270  
 Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys  
 275 280 285  
 Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu  
 290 295 300

Thr Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys  
 305 310 315 320  
 Val Ser Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys  
 325 330 335  
 Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser  
 340 345 350  
 Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys  
 355 360 365  
 Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln  
 370 375 380  
 Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly  
 385 390 395 400  
 Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln  
 405 410 415  
 Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn  
 420 425 430  
 His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys  
 435 440 445

<210> 39  
 <211> 660  
 <212> DNA  
 <213> Homosapien

<400> 39  
 gacatcgta tgaccaggc tccagactcc ctggctgtgt ctctggcgaa gaggccacc 60  
 atcaactgca agtccagcc gagtgttta tacagctcca acaataagaa ctatggatt 120  
 tggtaccaggc agagaccagg acagcctctt aagctgctca ttactgggc atctaccgg 180  
 gaatccgggg tccctgaccg attcagtgcc agccggctcg ggacagattt cactctcacc 240  
 atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttttattct 300  
 ccgtggacgt tcggccaagg gaccaaggta gaaatcaaac gaactgtggc tgcaccatct 360  
 gtcttcatct tccccccatc tggatggcagg ttggaaatctg gaactgcctc tggatgtgc 420  
 ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgaa taacgcctc 480  
 caatccggta actcccaagg gagggtcaca gaggaggaca gcaaggacag caccacacgc 540  
 ctcagcagca ccctgacgct gagccaaagca gactacgaga aacacaaagt ctacgcctgc 600  
 gaagtcaccc atcaggccct gagctcgccc gtcacaaaga gcttcaacag gggagagtgt 660

<210> 40  
 <211> 220  
 <212> PRT  
 <213> Homosapien

<400> 40  
 Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
 1 5 10 15  
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
 20 25 30  
 Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Arg Pro Gly Gln  
 35 40 45  
 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val  
 50 55 60  
 Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
 65 70 75 80

Ile	Ser	Ser	Leu	Gln	Ala	Glu	Asp	Val	Ala	Val	Tyr	Tyr	Cys	Gln	Gln
85									90					95	
Tyr	Phe	Tyr	Ser	Pro	Trp	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile
	100						105					110			
Lys	Arg	Thr	Val	Ala	Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp
115							120					125			
Glu	Gln	Leu	Lys	Ser	Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn
130						135					140				
Phe	Tyr	Pro	Arg	Glu	Ala	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu
145						150				155			160		
Gln	Ser	Gly	Asn	Ser	Gln	Glu	Ser	Val	Thr	Glu	Gln	Asp	Ser	Lys	Asp
	165						170					175			
Ser	Thr	Tyr	Ser	Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala	Asp	Tyr		
	180						185					190			
Glu	Lys	His	Lys	Val	Tyr	Ala	Cys	Glu	Val	Thr	His	Gln	Gly	Leu	Ser
	195						200					205			
Ser	Pro	Val	Thr	Lys	Ser	Phe	Asn	Arg	Gly	Glu	Cys				
	210						215					220			

<210> 41  
<211> 556  
<212> DNA  
<213> Homosapien

<400> 41  
caggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtc 60  
tcctgcagg tttccggaca cattttcaact gaatttatcca tacactgggt gcgacaggct 120  
cctggaaaag ggctcgagtg gatgggaggt tttatccctg aagatggtga aacaatctac 180  
gcacagaagt tccaggcag agtcaccatg accaggagaca catctacaga cacagtctac 240  
atggagctga gcagcctgag atctgaggac acggccgtgtt attactgtgc aaccaacgtat 300  
ttttggagtg gttatatttga ctactggggc cagggAACCC tggtcaccgt ctccctcagcc 360  
tccaccaagg gcccattcggt cttcccccgt gcggccctgtt ccaggagcac ctccgagagc 420  
acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcgtgg 480  
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga 540  
ctctactccc tcagca 556

<210> 42  
<211> 185  
<212> PRT  
<213> Homosapien

<400> 42  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly His Ile Phe Thr Glu Leu  
20 25 30  
Ser Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Val Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95

Ala Thr Asn Asp Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly  
                   100                  105                  110  
 Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
                   115                  120                  125  
 Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
                   130                  135                  140  
 Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
                   145                  150                  155                  160  
 Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
                   165                  170                  175  
 Gln Ser Ser Gly Leu Tyr Ser Leu Ser  
                   180                  185

<210> 43  
 <211> 490  
 <212> DNA  
 <213> Homosapien

<400> 43  
 gacatcgta tgacccagtc tccaggctcc ctggctgtgt ctctggcga gagggccacc 60  
 atcaactgca agtccagcca gagtattta ttcaaggcca acaataagaa ctatctaact 120  
 tggtaccagc agaaaaccagg acagcctcct aaactgctca tttactggc atctatccgg 180  
 gaatccgggg tccctgatcg attcagtgcc agccggctcg ggtcaaattt cactctcacc 240  
 atcaccagcc tgcaggctga agatgtggca atttattact gtcagcaata ttatagtagt 300  
 ccgtggacgt tcggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgaccatct 360  
 gtcttcatct tccccccatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420  
 ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgccctc 480  
 caatcgggta  490

<210> 44  
 <211> 163  
 <212> PRT  
 <213> Homosapien

<400> 44  
 Asp Ile Val Met Thr Gln Ser Pro Gly Ser Leu Ala Val Ser Leu Gly  
   1                  5                  10                  15  
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Ile Leu Phe Arg  
   20                  25                  30  
 Ser Asn Asn Lys Asn Tyr Leu Thr Trp Tyr Gln Gln Lys Pro Gly Gln  
   35                  40                  45  
 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Ile Arg Glu Ser Gly Val  
   50                  55                  60  
 Pro Asp Arg Phe Ser Gly Ser Gly Ser Asn Phe Thr Leu Thr  
   65                  70                  75                  80  
 Ile Thr Ser Leu Gln Ala Glu Asp Val Ala Ile Tyr Tyr Cys Gln Gln  
   85                  90                  95  
 Tyr Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
   100                  105                  110  
 Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
   115                  120                  125  
 Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
   130                  135                  140  
 Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu

145  
Gln Ser Gly

150

155

160

<210> 45  
<211> 559  
<212> DNA  
<213> Homosapien

<400> 45  
caggtccagc tggcacagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtc 60  
tcctgcaagg tttccggata caccctact gaattatcca tgcactgggt gcgacaggct 120  
cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatggtga aacaatcaac 180  
gcacagaagt tccaggcag agtcaccatg accgaggaca catctacaga cacaggctac 240  
atggagctga gcagccctgat atctgaggac acggccgtgt attactgtgc aacagatcct 300  
ggtgatata gtggctactt tgaccactgg ggcaggaa ccctggtcac cgctccctca 360  
gcctccacca agggccatc ggtttcccc ctggcgcct gctccaggag cacctccgag 420  
agcacagcgg ccctgggctg cctggtcaag gactacttcc ccgaaccggc gacggtgtcg 480  
tggactcag ggcgtctgac cagcggcgtg cacacottcc cagctgtcct acagtccctca 540  
ggactctact ccctcagca 559

<210> 46  
<211> 186  
<212> PRT  
<213> Homosapien

<400> 46  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Asn Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Gly Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Thr Asp Pro Gly Gly Tyr Ser Gly Tyr Phe Asp His Trp Gly Gln  
100 105 110  
Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val  
115 120 125  
Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala  
130 135 140  
Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser  
145 150 155 160  
Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val  
165 170 175  
Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser  
180 185

<210> 47

<211> 464  
<212> DNA  
<213> Homosapien

<400> 47  
gacatcgta tgacccagtc tccagattc ctggctgtgt ctctggcga gaggcccacc 60  
atcaactgca agtccagcca gagtgtttt tacagctcca acaataagaa ctacttagtt 120  
tggtaccagc agaaacccgg acagcctcct aagctgctcc tttactggc atctaccgg 180  
gaatccgggg tccctgaccg attcagtgcc agcgggtctg ggacagattt cactctcacc 240  
atcagcagcc tgcaggctga agatgtgca gtttattact gtcagcaata ttatagttct 300  
ccgtggacgt tcggccaagg gaccaaggtg gaaatcaaac gaactgtggc tgaccatct 360  
gtcttcatct tcccgcctc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420  
ctgctgaata acttctatcc cagagagcc aaagtacagt ggaa 464

<210> 48  
<211> 154  
<212> PRT  
<213> Homosapien

<400> 48  
Asp Ile Val Met Thr Gln Ser Pro Asp Phe Leu Ala Val Ser Leu Gly  
1 5 10 15  
Glu Arg Pro Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Phe Tyr Ser  
20 25 30  
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln  
35 40 45  
Pro Pro Lys Leu Leu Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val  
50 55 60  
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
65 70 75 80  
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
85 90 95  
Tyr Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
100 105 110  
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
115 120 125  
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
130 135 140  
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp  
145 150

<210> 49  
<211> 476  
<212> DNA  
<213> Homosapien

<400> 49  
caggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg ttccggata caccctact gaattatcca tgcactgggt gcgcacaggct 120  
cctggaaaag ggcttgatgt gatggaggt tttatccctg aagatgtga aacaatctac 180  
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaca cacagcctac 240  
atggaaactga gcagcctgag atctgaggac acggccgtgt attactgtgc aacacacgt 300  
ttttggatgt cttatccatc ctactgggc cagggaaacc tggtcaccgt ctcctcagct 360  
tccaccaagg gcccattccgt ctccccctg gcccctgct ccaggagcac ctccgagagc 420

acagccgccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtc 476

<210> 50  
<211> 158  
<212> PRT  
<213> Homosapien

<400> 50  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Asp Glu Thr Ile Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr His Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Thr His Asp Phe Trp Ser Ala Tyr Phe Tyr Tyr Trp Gly Gln Gly  
100 105 110  
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
130 135 140  
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val  
145 150 155

<210> 51  
<211> 490  
<212> DNA  
<213> Homosapien

<400> 51  
gacatcgta tgacccagtc tccagactcc ctggctgtgt ctctggcga gagggccacc 60  
atcaactgca agtccagcca gagtgttta tacggctcca acaataagag ctacttagct 120  
tggtaccaggc agaaaaccagg acagccctt aagctgctca tttactggc atctacccgg 180  
gaatccgggg tccctgaccg attcagtgcc agcgggtctg ggacagattt cactctcacc 240  
atcagcagcc tgcaggctgc agatgtggca gtttattact gtcagcaaca ttatagact 300  
ccgtgcagtt ttggccaggg gaccaaactg gagatcaaac gaactgtggc tgaccatct 360  
gtcttcatct tcccgccatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420  
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgcccctc 480  
caatcggtta 490

<210> 52  
<211> 163  
<212> PRT  
<213> Homosapien

<400> 52  
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Gly

20	25	30
Ser Asn Asn Lys Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln		
35	40	45
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val		
50	55	60
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr		
65	70	75
Ile Ser Ser Leu Gln Ala Ala Asp Val Ala Val Tyr Tyr Cys Gln Gln		
85	90	95
His Tyr Ser Thr Pro Cys Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile		
100	105	110
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp		
115	120	125
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn		
130	135	140
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu		
145	150	155
Gln Ser Gly		160

<210> 53  
 <211> 550  
 <212> DNA  
 <213> Homosapien

<400> 53  
 caggtgcagc tgggtgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
 tcctgcagg cttctggata caccttcacc ggctactatc tgcactgggt gcgacaggcc 120  
 cctggacaag ggcttgagtg gatgggatgg atcaaccctt acaatgatgg cacaactat 180  
 gcacagaagt ttcaggcagc ggtcaccatg accaggacac cgtccatcag cacagcctac 240  
 atggagctga gcaggctgag atctgacgac acggccgttt attactgtgc gagagatata 300  
 gccgcagctg gagccgtcta ctttgactac tggggccagg gaaccctggg caccgtctcc 360  
 tcagcttcca ccaagggccc atccgtcttc cccctggcgc cctgctccag gacacccctcc 420  
 gagagcacac ccgcctggg ctgcctggc aaggactact ttcccccgaac cggtgacgg 480  
 gtcgtggAAC tcaggcgcgg tgaccagcgg cgtgcacacc ttcccgctg tcctacagtc 540  
 ctcaggactt 550

<210> 54  
 <211> 183  
 <212> PRT  
 <213> Homosapien

<400> 54  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr  
 20 25 30  
 Tyr Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Ile Asn Pro Tyr Asn Asp Gly Thr Asn Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys

	85	90	95
Ala Arg Asp Ile Ala Ala Ala Gly Ala Val Tyr Phe Asp Tyr Trp Gly			
100	105	110	
Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser			
115	120	125	
Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala			
130	135	140	
Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Arg Thr Gly Asp Gly			
145	150	155	160
Val Val Glu Leu Arg Arg Pro Asp Gln Arg Arg Ala His Leu Pro Gly			
165	170	175	
Cys Pro Thr Val Leu Arg Thr			
180			

<210> 55  
 <211> 458  
 <212> DNA  
 <213> Homosapien

<400> 55  
 gacatccaga tgacccagtc tccatccctcc ctgtctgcat ctgttaggaga cagagtcacc 60  
 atcaattgcc aggcgagtca ggacattacc acctatttaa attggatca gcagaaacca 120  
 gggaaagccc ctaagctcct gatctacgat gcatccaatt tggaaacagg ggtcccatca 180  
 aggttcagtg gaagtggatc tgggacagat ttactttca ccatcagcag cctgcagcct 240  
 gaagatattt caacatatta ctgtcaacaa tatgataatc tcccgatcac cttcggccaa 300  
 gggacacgac tggagattaa acgaactgtg gctgcaccat ctgtcttcat ctcccggcca 360  
 tctgatgagc agttgaaatc tggaaactgcc tctgttgtgt gcctgctgaa taacttctat 420  
 cccagagagg ccaaagtaca gggaaagggtgg ataaacgcc 458

<210> 56  
 <211> 152  
 <212> PRT  
 <213> Homosapien

<400> 56  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Gln Ala Ser Gln Asp Ile Thr Thr Tyr  
 20 25 30  
 Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile  
 35 40 45  
 Tyr Asp Ala Ser Asn Leu Glu Thr Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Tyr Asp Asn Leu Pro Ile  
 85 90 95  
 Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg Thr Val Ala Ala  
 100 105 110  
 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly  
 115 120 125  
 Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala  
 130 135 140  
 Lys Val Gln Gly Arg Trp Ile Thr

<210> 57  
 <211> 571  
 <212> DNA  
 <213> Homosapien

<400> 57  
 caggtccagc tggcacagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
 tcctgcaagg tttccggata caccctcaact gaattatcca tgcactgggt gcgacaggct 120  
 cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatggtga aacaatctac 180  
 gcacagaagt tccagggcag agtcatgatg accgaggaca catctacaga cacagcctc 240  
 atggacctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacagacgat 300  
 atgttgaccc ctcactacct ctacttcgtt atggacgtct ggggccaagg gaccacggtc 360  
 accgtctcct cagcttccac caagggccca tccgtttcc ccctggcgcc ctgctccagg 420  
 agcacctccg agagcacagc cggccctggc tgcttgcaggacta ccccgaaaccg 480  
 gtgacggtgt cgtggaactc aggcgcctg accagcggcg tgcacacctt cccggctgtc 540  
 ctacagtccct caggactcta ctccctcagc a 571

<210> 58  
 <211> 190  
 <212> PRT  
 <213> Homosapien

<400> 58  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
 20 25 30  
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Met Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Phe  
 65 70 75 80  
 Met Asp Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Thr Asp Asp Met Leu Thr Pro His Tyr Leu Tyr Phe Gly Met Asp  
 100 105 110  
 Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Ala Ser Thr Lys  
 115 120 125  
 Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu  
 130 135 140  
 Ser Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro  
 145 150 155 160  
 Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr  
 165 170 175  
 Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser  
 180 185 190

<210> 59  
 <211> 458  
 <212> DNA

<213> Homosapien

<400> 59

gacatccaga tgacccagtc tccatccccc ctgtctgcat ctgttaggaga cagagtcacc 60  
atcaacttgc gggcaagtca gggcattaga aatgatttag gctggtatca gcagaaacca 120  
gggaaagccc ctaagcgcct gatctatgct acatccagg tgcaaagtgg ggtcccatca 180  
aggttcagcg gcagtggatc tgggacagaa ttcaactctca caatcagcag cctgcagcct 240  
gaagattttg caacttatta ctgtctacag cataataactt acccattcac tttcgccct 300  
gggaccaaag tggatatcaa acgaactgtg gctgcaccat ctgtcttcat cttccgcac 360  
tctgatgagc agttgaaatc tggaaactgcc tctgttgtt gcctgtgaa taacttctat 420  
cccagagagg ccaaagtaca gtggaaagggtg gataacgc 458

<210> 60

<211> 152

<212> PRT

<213> Homosapien

<400> 60

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
1 5 10 15  
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
20 25 30  
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
35 40 45  
Tyr Ala Thr Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
50 55 60  
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
65 70 75 80  
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Thr Tyr Pro Phe  
85 90 95  
Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys Arg Thr Val Ala Ala  
100 105 110  
Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly  
115 120 125  
Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala  
130 135 140  
Lys Val Gln Trp Lys Val Asp Asn  
145 150

<210> 61

<211> 1338

<212> DNA

<213> Homosapien

<400> 61

caggtgcagc tgcaggagtc gggcccgagga ctggtaagc cttcacagac cctgtccctc 60  
acctgcactg tctcagggtgg ctccatcagc agtgggtggta actactggaa ctggatccgc 120  
cagcacccag ggaaggccct ggagtggatt gggtacatct attacagtgg aaacacctac 180  
tacaaccctgt ccctcaagag tcgaattacc atatcaatag acacgtctaa gaaccagttc 240  
tccctgaccc tgagctctgt gactgcccgcg gacacggccg tgtattactg tgcgagagat 300  
ggtggagacg atgccttga tatctgggc caagggacaa tggtcaccgt ctcttcagct 360  
tccaccaagg gcccattccgt cttcccccgt gcgcctgtccctg ccaggagcac ctccgagagc 420  
acagccgccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg 480  
aactcaggcg ccctgaccag cggcgtgcac accttccccgg ctgtcctaca gtcctcagga 540

ctctactccc tcagcagcgt ggtgaccgtg ccctccagca gcttggcac gaagacctac 600  
 acctgcaacg tagatcacaa gcccagcaac accaaggtagg acaagagagt tgagtccaaa 660  
 tatggtcccc catgcccata atgcccagca cctgagttcc tggggggacc atcagtcttc 720  
 ctgttccccca caaaaacccaa ggacactctc atgatctccc ggaccctga ggtcacgtgc 780  
 gtgggtgggg acgtgagcca ggaagacccc gaggtccagt tcaactggta cgtggatggc 840  
 gtggaggtgc ataatgccaa gacaaagccg cggaggagc agttcaacag cacgtaccgt 900  
 gtggtcagcg tcctcaccgt cctgcaccag gactggctga acggcaagga gtacaagtgc 960  
 aaggcttcca acaaaggcct cccgtctcc atcgagaaaa ccatctccaa agccaaagg 1020  
 cagccccgag agccacaggt gtacaccctg ccccatccc aggaggagat gaccaagaac 1080  
 caggtcagcc tgacctgcct ggtcaaaggc ttctacccca ggcacatgc cgtggagtgg 1140  
 gagagcaatg ggcagccgga gaacaactac aagaccacgc ctcccgtgct ggactccgac 1200  
 ggctccttct tcctctacag caggctaacc gtggacaaga gcaggtggca ggagggaaat 1260  
 gtcttctcat gctccgtat gcatgaggt ctgcacaacc actacacaca gaagagcctc 1320  
 tccctgtctc tggtaaa 1338

<210> 62  
 <211> 446  
 <212> PRT  
 <213> Homosapien

<400> 62  
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln  
 1 5 10 15  
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Gly  
 20 25 30  
 Gly Asn Tyr Trp Asn Trp Ile Arg Gln His Pro Gly Lys Gly Leu Glu  
 35 40 45  
 Trp Ile Gly Tyr Ile Tyr Tyr Ser Gly Asn Thr Tyr Tyr Asn Pro Ser  
 50 55 60  
 Leu Lys Ser Arg Ile Thr Ile Ser Ile Asp Thr Ser Lys Asn Gln Phe  
 65 70 75 80  
 Ser Leu Thr Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr  
 85 90 95  
 Cys Ala Arg Asp Gly Gly Asp Asp Ala Phe Asp Ile Trp Gly Gln Gly  
 100 105 110  
 Thr Met Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
 115 120 125  
 Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
 130 135 140  
 Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
 145 150 155 160  
 Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
 165 170 175  
 Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser  
 180 185 190  
 Ser Ser Leu Gly Thr Lys Thr Tyr Thr Cys Asn Val Asp His Lys Pro  
 195 200 205  
 Ser Asn Thr Lys Val Asp Lys Arg Val Glu Ser Lys Tyr Gly Pro Pro  
 210 215 220  
 Cys Pro Ser Cys Pro Ala Pro Glu Phe Leu Gly Pro Ser Val Phe  
 225 230 235 240  
 Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro  
 245 250 255  
 Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val  
 260 265 270

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr  
 275 280 285  
 Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val  
 290 295 300  
 Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys  
 305 310 315 320  
 Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser  
 325 330 335  
 Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro  
 340 345 350  
 Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val  
 355 360 365  
 Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly  
 370 375 380  
 Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp  
 385 390 395 400  
 Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp  
 405 410 415  
 Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His  
 420 425 430  
 Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys  
 435 440 445

<210> 63  
 <211> 642  
 <212> DNA  
 <213> Homosapien

<400> 63  
 gacatccaga tgacccagtc tccatccctcc ctgtctgcat ctgttaggaga cagagtcacc 60  
 atcaattgcc aggcgagtca ggacattagc aactatttaa attggatcatca gcagaaaacca 120  
 gggaaagccc ctaaaactcct gatctacat gcatccaatt tggaaacagg ggtcccatca 180  
 aggttcagtg gaagtggatc tgggacagat tttactttca ccatcaacag cctgcagcct 240  
 gaagatattt caacatatta ctgtcaagaa tataataatc tcccgtacag ttttggccag 300  
 gggaccaagt tggagatcaa acgaactgtg gctgcaccat ctgtcttcat cttcccgcca 360  
 tctgatgagc agttgaaatc tggaaactgccc tctgttgtgt gcctgctgaa taaattctat 420  
 cccagagagg ccaaagtaca gtggaaagggtg gataacgccc tccaatcggg taactcccag 480  
 gagagtgtca cagagcagga cagcaaggac agcacctaca gcctcagcag caccctgacg 540  
 ctgagcaaag cagactacga gaaaacacaaa gtctacgcct gcgaagtcac ccatcaggc 600  
 ctgagctcgc ccgtcacaaa gagcttcaac agggagagt gt 642

<210> 64  
 <211> 214  
 <212> PRT  
 <213> Homosapien

<400> 64  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Gln Ala Ser Gln Asp Ile Ser Asn Tyr  
 20 25 30  
 Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile  
 35 40 45  
 Tyr Asp Ala Ser Asn Leu Glu Thr Gly Val Pro Ser Arg Phe Ser Gly

50	55	60													
Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Phe	Thr	Ile	Asn	Ser	Leu	Gln	Pro
65															80
Glu	Asp	Ile	Ala	Thr	Tyr	Tyr	Cys	Gln	Glu	Tyr	Asn	Asn	Leu	Pro	Tyr
															95
Ser	Phe	Gly	Gln	Gly	Thr	Lys	Leu	Glu	Ile	Lys	Arg	Thr	Val	Ala	Ala
															100
Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lys	Ser	Gly
															105
Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu	Ala
															110
Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu	Gln	Ser	Gly	Asn	Ser	Gln
															115
Glu	Ser	Val	Thr	Glu	Gln	Asp	Ser	Lys	Asp	Ser	Thr	Tyr	Ser	Leu	Ser
															120
Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala	Asp	Tyr	Glu	Lys	His	Lys	Val	Tyr
															125
Ala	Cys	Glu	Val	Thr	His	Gln	Gly	Leu	Ser	Ser	Pro	Val	Thr	Lys	Ser
															130
Phe	Asn	Arg	Gly	Glu	Cys										135
															140
															145
															150
															155
															160
															165
															170
															175
															180
															185
															190
															195
															200
															205
															210

<210> 65  
 <211> 1341  
 <212> DNA  
 <213> Homosapien

<400> 65  
 caggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgcaggtc 60  
 tcctgcaagg tttccggaga caccctact gaattatcca tgcactgggt gcgacaggct 120  
 cctggaaaag ggcttgagt gatggaggt tttgatcctg aagatggtga aacaatctac 180  
 gcacggaaatg tccaggccag agtcaccatg accgaggaca catctacaga cacagttac 240  
 atggagctga gcagcctgag atctgaggac acgcccgtgt atttctgtgc aacagattca 300  
 cgtggatata gtggctactt tgacaactgg ggcaggaa ccctggtcac cgctctcctca 360  
 gcttccacca agggcccatc cgtcttcccc ctggcgcct gctccaggag caccctccgag 420  
 agcacagccg ccctgggctg cctggtcaag gactacttcc ccgaaccggt gacgggtgtcg 480  
 tggaaactcag gcccctgac cagcggcgtg cacaccttcc cggctgtcct acagtcctca 540  
 ggactctact ccctcagcag cgtggtgacc gtggccttcca gcagcttggg cacgaagacc 600  
 tacacctgca acgttagatca caagcccagc aacaccaagg tggacaagag agttgagtcc 660  
 aaatatggtc ccccatgccc atcatgccc gcacctgagt tcctgggggg accatcagtc 720  
 ttcctgttcc cccaaaacc caaggacact ctatgatct cccggacccc tgaggtcactg 780  
 tgcgtggagg tggacgtgag ccaggaagac cccgagggtcc agttcaactg gtacgtggat 840  
 ggcgtggagg tgcataatgc caagacaaag cccggggagg agcagttcaa cagcacgtac 900  
 cgtgtggtca gcgtcctcac cgtcctgcac cagactggc tgaacggcaa ggagtacaag 960  
 tgcacgggtct ccaacaaaagg cctcccgccc tccatcgaga aaaccatctc caaagccaaa 1020  
 gggcagccccc gagagccaca ggtgtacacc ctggccccc cccaggagga gatgaccaag 1080  
 aaccagggtca gcctgaccc cctggtcaaa ggcttctacc ccagcgcacat cgcgggtggag 1140  
 tgggagagca atgggcagcc ggagaacaac tacaagacca cgcctcccgat gctggactcc 1200  
 gacggctcct tcttcctcta cagcaggcta accgtggaca agagcagggtg gcaaggagggg 1260  
 aatgtcttct catgctccgt gatgcatgag gctctgcaca accactacac acagaagagc 1320  
 ctctccctgt ctctggtaa a 1341

<210> 66  
 <211> 447

<212> PRT

<213> Homosapien

<400> 66

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Gln Val Ser Cys Lys Val Ser Gly Asp Thr Leu Thr Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Arg Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Val Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys  
85 90 95  
Ala Thr Asp Ser Arg Gly Tyr Ser Gly Tyr Phe Asp Asn Trp Gly Gln  
100 105 110  
Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val  
115 120 125  
Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala  
130 135 140  
Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser  
145 150 155 160  
Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val  
165 170 175  
Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro  
180 185 190  
Ser Ser Ser Leu Gly Thr Lys Thr Tyr Thr Cys Asn Val Asp His Lys  
195 200 205  
Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu Ser Lys Tyr Gly Pro  
210 215 220  
Pro Cys Pro Ser Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val  
225 230 235 240  
Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr  
245 250 255  
Pro Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu  
260 265 270  
Val Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys  
275 280 285  
Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser  
290 295 300  
Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys  
305 310 315 320  
Cys Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile  
325 330 335  
Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro  
340 345 350  
Pro Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu  
355 360 365  
Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn  
370 375 380  
Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser  
385 390 395 400  
Asp Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg

405	410	415
Trp Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu		
420	425	430
His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys		
435	440	445

<210> 67  
 <211> 660  
 <212> DNA  
 <213> Homosapien

<400> 67  
 gacatcgta tgacccagtc tccagactcc ctggctgtgt ctctggcga gagggccacc 60  
 atcaactgca agtccagcca gagtgtttta tacagctcca acaataacaa ctacttagtt 120  
 tggtaccagc agaaaccagg acagcctcct aaattgctca tttactggc atctaccgg 180  
 gaattcgggg ttccgtgaccg attcagtgcc agccggctcg ggacagattt cactctcacc 240  
 atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttattttct 300  
 ccgtggacgt tcggccaagg gaccaaggtg gaaatcaaac gaactgtggc tgcaccatct 360  
 gtcttcatct tccccccatc tgcaggccatc ttgaaatctg gaactgcctc tgggtgtgc 420  
 ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaaggtgga taacgcctc 480  
 caatcgggta actcccagga gagtgtcaca gaggcaggaca gcaaggacag cacctacagc 540  
 ctcagcagca ccctgacgct gagcaaagca gactacgaga aacacaaagt ctacgcctgc 600  
 gaagtcaccc atcaggccct gagctcgccc gtacacaaga gttcaacag gggagagtgt 660

<210> 68  
 <211> 220  
 <212> PRT  
 <213> Homosapien

<400> 68  
 Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
 1 5 10 15  
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
 20 25 30  
 Ser Asn Asn Asn Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln  
 35 40 45  
 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Phe Gly Val  
 50 55 60  
 Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
 65 70 75 80  
 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
 85 90 95  
 Tyr Tyr Phe Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
 100 105 110  
 Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
 115 120 125  
 Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
 130 135 140  
 Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu  
 145 150 155 160  
 Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp  
 165 170 175  
 Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr

180	185	190
Glu Lys His Lys Val Tyr Ala Cys	Glu Val Thr His Gln Gly	Leu Ser
195	200	205
Ser Pro Val Thr Lys Ser Phe Asn Arg Gly	Glu Cys	
210	215	220

<210> 69  
 <211> 556  
 <212> DNA  
 <213> Homosapien

<400> 69

caggtccagc tggcacatc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
 tcctgcagg tttccggata caccctcaact gatttatcca tgcactgggt gcgacaggct 120  
 cctggaaaag ggcttgagtg gatggggaggt tttgatcctg aagatggtga aacaatctac 180  
 gcacagaagt tccaggcag agtcaccatg accgaggaca catcttcaga cacagcctac 240  
 atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aaccacgaa 300  
 ttttggagtg gttatattga ctactgggc cagggAACCC tggtcaccgt ctccctcagct 360  
 tccaccaagg gcccattccgt cttcccccgt gcgcctgtgt ccaggagcac ctccgagagc 420  
 acagccgccc tgggctgcct ggtcaaggac tacttcccg aaccggtgac ggtgtcgtgg 480  
 aactcaggcg ccctgaccag cggcgtgcac accttcccg ctgtcctaca gtcctcagga 540  
 ctctactccc tcagca 556

<210> 70

<211> 185  
 <212> PRT  
 <213> Homosapien

<400> 70

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala			
1	5	10	15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Asp Leu			
20	25	30	
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met			
35	40	45	
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe			
50	55	60	
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Ser Asp Thr Ala Tyr			
65	70	75	80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys			
85	90	95	
Ala Thr His Glu Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly			
100	105	110	
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe			
115	120	125	
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu			
130	135	140	
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp			
145	150	155	160
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu			
165	170	175	
Gln Ser Ser Gly Leu Tyr Ser Leu Ser			
180	185		

<210> 71  
<211> 476  
<212> DNA  
<213> Homosapien

<400> 71  
gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctggcga gagggccacc 60  
atcaactgca agtccagcca gagtgttta ttcaagctcca acaataagag ctacttaact 120  
tggtaccagc agaaaccagg acagcctcct aaattactca ttttctggc atctatccgg 180  
gaatccgggg tccctgaccg aatcagtgacg agcgggtctg ggacagatct cactctcacc 240  
atcagcagcc tgcaggctga agatgcgca gtttattact gtcagcaata ttatagtagt 300  
ccgtggacgt tcggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgcaccatct 360  
gtcttcatct tccccccatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420  
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaaggtgga taacgc 476

<210> 72  
<211> 158  
<212> PRT  
<213> Homosapien

<400> 72  
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Phe Ser  
20 25 30  
Ser Asn Asn Lys Ser Tyr Leu Thr Trp Tyr Gln Gln Lys Pro Gly Gln  
35 40 45  
Pro Pro Lys Leu Leu Ile Phe Trp Ala Ser Ile Arg Glu Ser Gly Val  
50 55 60  
Pro Asp Arg Ile Ser Gly Ser Gly Ser Gly Thr Asp Leu Thr Leu Thr  
65 70 75 80  
Ile Ser Ser Leu Gln Ala Glu Asp Ala Ala Val Tyr Tyr Cys Gln Gln  
85 90 95  
Tyr Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
100 105 110  
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
115 120 125  
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
130 135 140  
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn  
145 150 155

<210> 73  
<211> 546  
<212> DNA  
<213> Homosapien

<400> 73  
caggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg ttccggata caccctcagt gaattatcca tgcactgggt gcgacaggct 120  
cctggaaaag ggcttgatgt gatgggaggt tttgatcctg aagatggta aataatccac 180  
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacaggcgat 300

ttttggagtg gttattacct tgactggtgg ggcagggaa ccctggcac cgttcctca 360  
gcttccacca agggccatc cgtttcccc ctggcgccct gctccaggag cacctccgag 420  
agcacagccg ccctgggctg cctggtaag gactacttc ccgaaccggg gacgggtgtcg 480  
tggaaacttag gcccctgac cagcggcggt cacacttcc cggctgtcct acagtccctca 540  
ggactt 546

<210> 74  
<211> 182  
<212> PRT  
<213> Homosapien

<400> 74  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Ser Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Gly Glu Ile Ile His Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Thr Gly Asp Phe Trp Ser Gly Tyr Tyr Leu Asp Trp Trp Gly Gln  
100 105 110  
Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val  
115 120 125  
Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala  
130 135 140  
Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser  
145 150 155 160  
Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val  
165 170 175  
Leu Gln Ser Ser Gly Leu  
180

<210> 75  
<211> 457  
<212> DNA  
<213> Homosapien

<400> 75  
gaaatagtga tgatgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60  
ctctcctgca gggccagtca gagtgttaac agcaacttag cctggcacca gcagaaacct 120  
ggccaggctc ccaggctcct catcaacggt gcatccacca gggccactgg catcccagcc 180  
aggttcagtg gcagtgggtc tgggacagag ttcaccctca ccatcagcag cctgcagttct 240  
gaagattttcaatatttata ctgtcagcag tataatgact ggcctacgtt cactttcgcc 300  
ggagggacca aggtggagat caatcgaact gtggctgcac catctgtctt catcttcccg 360  
ccatctgtatc agcagttgaa atctggaaact gcctctgttg tgcctgctt gaataacttc 420  
tatcccagag aggccaaagt acagtggaa ggtggat 457

<210> 76  
<211> 152

<212> PRT  
<213> Homosapien

<400> 76

Glu	Ile	Val	Met	Met	Gln	Ser	Pro	Ala	Thr	Leu	Ser	Val	Ser	Pro	Gly	
1					5					10					15	
Glu	Arg	Ala	Thr	Leu	Ser	Cys	Arg	Ala	Ser	Gln	Ser	Val	Asn	Ser	Asn	
										20			25		30	
Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Arg	Leu	Leu	Ile	
										35		40		45		
Asn	Gly	Ala	Ser	Thr	Arg	Ala	Thr	Gly	Ile	Pro	Ala	Arg	Phe	Ser	Gly	
										50		55		60		
Ser	Gly	Ser	Gly	Thr	Glu	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Ser	
										65		70		75		80
Glu	Asp	Phe	Ala	Ile	Tyr	Tyr	Cys	Gln	Gln	Tyr	Asn	Asp	Trp	Pro	Thr	
										85		90		95		
Phe	Thr	Phe	Gly	Gly	Thr	Lys	Val	Glu	Ile	Asn	Arg	Thr	Val	Ala		
									100		105		110			
Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lys	Ser	
									115		120		125			
Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu	
									130		135		140			
Ala	Lys	Val	Gln	Trp	Glu	Gly	Gly									
					145		150									

<210> 77  
<211> 470  
<212> DNA  
<213> Homosapien

<400> 77

caggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg ttccggata caccctcaact gaattatcca tgcactgggt gcgacaggct 120  
cctggaaaag ggctttagtg gatgggaggt tttgatcctg aagatggtga aacaatgtac 180  
gcacagaagt tccaggcgcag agtcaccatg accgaggaca catctacaga cacagcctac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aaccgacgat 300  
ttttggagtg gttatgttga ctactggggc cagggAACCC tggtcaccgt ctcctcagcc 360  
tccaccaagg gcccattcggt cttcccccctg gcgcctgct ccaggagcac ctccgagagc 420  
acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccggcagg 470

<210> 78  
<211> 156  
<212> PRT  
<213> Homosapien

<400> 78

Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Ala
1									1						15
Ser	Val	Lys	Val	Ser	Cys	Lys	Val	Ser	Gly	Tyr	Thr	Leu	Thr	Glu	Leu
										20		25		30	
Ser	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Met
										35		40		45	
Gly	Gly	Phe	Asp	Pro	Glu	Asp	Gly	Glu	Thr	Met	Tyr	Ala	Gln	Lys	Phe
									50		55		60		

Gln	Gly	Arg	Val	Thr	Met	Thr	Glu	Asp	Thr	Ser	Thr	Asp	Thr	Ala	Tyr
65					70					75					80
Met	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
						85				90					95
Ala	Thr	Asp	Asp	Phe	Trp	Ser	Gly	Tyr	Phe	Asp	Tyr	Trp	Gly	Gln	Gly
						100			105						110
Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe
						115			120						125
Pro	Leu	Ala	Pro	Cys	Ser	Arg	Ser	Thr	Ser	Glu	Ser	Thr	Ala	Ala	Leu
						130			135						140
Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Ala				
					145			150							155

<210> 79  
 <211> 490  
 <212> DNA  
 <213> Homosapien

<400> 79  
 gacatcgta tgacccagtc tccagactcc ctggctgtgt ctctggacga gagggccacc 60  
 atcaactgca agtccagcca gagtgttta tacagtccca accaaaagaa ctacttagtt 120  
 tggtatcagc agaagccagg acagcctcct aagctgctcc ttactgggc atctatccgg 180  
 gaatccgggg tccctgaccg attcagtgcc agccgggtctg ggacagattt cactctcacc 240  
 atcagcagcc tgcaggctga agatgtggca gtttattact gtcaacaaag ttatttact 300  
 ccgtggacgt tcggccaagg gaccaaggtg gaaatcaaac gaactgtggc tgccaccatct 360  
 gtcttcatct tcccggccatc tcatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420  
 ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaaggtgga taacgcctc 480  
 caatcggtt 490

<210> 80  
 <211> 163  
 <212> PRT  
 <213> Homosapien

<400> 80  
 Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Asp  
 1 5 10 15  
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
 20 25 30  
 Pro Asn Gln Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln  
 35 40 45  
 Pro Pro Lys Leu Leu Tyr Trp Ala Ser Ile Arg Glu Ser Gly Val  
 50 55 60  
 Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
 65 70 75 80  
 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
 85 90 95  
 Ser Tyr Phe Thr Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
 100 105 110  
 Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
 115 120 125  
 Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
 130 135 140  
 Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu

145  
Gln Ser Gly

150

155

160

<210> 81  
<211> 556  
<212> DNA  
<213> Homosapien

<400> 81  
caggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg tttccggata caccctcagt gaattatcca tgcactgggt gcgacaggct 120  
cctggaaaag ggctttagtg gatgggaggt tttgatcctg aagatgtat aacaatctac 180  
gcacagaagt tccaggcgag agtcaccatg accgaggaca catctacaga cacagccttc 240  
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aaccacgat 300  
tttggagtg gttatccatca ctactggggc cagggaaaccc tggtcaccgt ctccctagct 360  
tccaccaagg gccccatccgt cttcccccgt gcgcctgtct ccaggagcac ctccgagagc 420  
acagccgccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg 480  
aactcaggcg ccctgaccag cggcgtgcac accttcccg ctgtcctaca gtcctcagga 540  
ctctactcccc tcagca 556

<210> 82  
<211> 185  
<212> PRT  
<213> Homosapien

<400> 82  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Ser Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Asp Glu Thr Ile Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Phe  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Thr His Asp Phe Trp Ser Gly Tyr Phe His Tyr Trp Gly Gln Gly  
100 105 110  
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
130 135 140  
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
145 150 155 160  
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
165 170 175  
Gln Ser Ser Gly Leu Tyr Ser Leu Ser  
180 185

<210> 83

<211> 476  
<212> DNA  
<213> Homosapien

<400> 83

gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctggcga gagggccacc 60  
atcaactgca agtccagcca gagtgttta tacagctccg acaataagag ctacttagtt 120  
tggtaccagc agaaaccagg acagcctccct aaggtgctca tttactggc atctattcgg 180  
gaatccgggg tccctgaccg attcagtgcc agccggctcg ggacagattt cactctcacc 240  
atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttatactagt 300  
ccgtggacgt tcggccaagg gaccaaggtg gaaatcaaac gaactgtggc tgcaccatct 360  
gtcttcatct tccccccatc tgatgaggcag ttgaaatctg gaactgcctc tgggtgtgc 420  
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgc 476

<210> 84

<211> 158  
<212> PRT  
<213> Homosapien

<400> 84

Asp	Ile	Val	Met	Thr	Gln	Ser	Pro	Asp	Ser	Leu	Ala	Val	Ser	Leu	Gly	
1					5				10					15		
Glu	Arg	Ala	Thr	Ile	Asn	Cys	Lys	Ser	Ser	Gln	Ser	Val	Leu	Tyr	Ser	
							20		25					30		
Ser	Asp	Asn	Lys	Ser	Tyr	Leu	Val	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	
									35		40			45		
Pro	Pro	Lys	Val	Leu	Ile	Tyr	Trp	Ala	Ser	Ile	Arg	Glu	Ser	Gly	Val	
									50		55			60		
Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	
									65		70			75		80
Ile	Ser	Ser	Leu	Gln	Ala	Glu	Asp	Val	Ala	Val	Tyr	Tyr	Cys	Gln	Gln	
									85		90			95		
Tyr	Tyr	Thr	Ser	Pro	Trp	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	
									100		105			110		
Lys	Arg	Thr	Val	Ala	Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	
									115		120			125		
Glu	Gln	Leu	Lys	Ser	Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	
									130		135			140		
Phe	Tyr	Pro	Arg	Glu	Ala	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn			
									145		150			155		

<210> 85

<211> 543  
<212> DNA  
<213> Homosapien

<400> 85

caggtccagc tggtagcgtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgttaagg tttccggata caccctcaact gaattatcca tgcactgggt gcgacaggct 120  
cctggaaaag ggcttgagtg gatgggaggt tttgatccctg aagatggtga aacaatctac 180  
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aatccacgag 300  
ttttggagtg gttatccatc ctactggggc cagggaaaccc tggtcaccgt ctccatcgat 360  
tccaccaagg gcccattccgt cttcccccgt gcgcctgtgt ccaggagcac ctccgagagc 420

acagccgccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcgtgg 480  
aactcaggcg ccctgaccag cggcgtgac accttcccg ctgtcctaca gtcctcagga 540  
ctt 543

<210> 86  
<211> 181  
<212> PRT  
<213> Homosapien

<400> 86  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Ile His Glu Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly  
100 105 110  
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
130 135 140  
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
145 150 155 160  
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
165 170 175  
Gln Ser Ser Gly Leu  
180

<210> 87  
<211> 477  
<212> DNA  
<213> Homosapien

<400> 87  
gacatcgta tgacccagtc tccagactcc ctggctgtgt ctctggcga gagggccacc 60  
atcaactgca agtccagcct gagtgttta tacagctcca acaataagaa ctattttagtt 120  
tggcaccc tc agaaaccagg acagcctcct aagttgctca tttactggc atctacccgg 180  
gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagatt cactctcacc 240  
atcagcagcc tgcaggccga agatgtggca gtttattact gtcagcaata ttatagttct 300  
ccgtggacgt tcggccaagg gaccaaggtg gaaatcaaac gaactgtggc tgcaccatct 360  
gtcttcatct tccccccatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420  
ctgctgaata acttctatcc cagagagggc aaagtacagt ggaagggtgga taacgcc 477

<210> 88  
<211> 159  
<212> PRT  
<213> Homosapien

<400> 88

Asp	Ile	Val	Met	Thr	Gln	Ser	Pro	Asp	Ser	Leu	Ala	Val	Ser	Leu	Gly
1				5				10						15	
Glu	Arg	Ala	Thr	Ile	Asn	Cys	Lys	Ser	Ser	Leu	Ser	Val	Leu	Tyr	Ser
				20				25						30	
Ser	Asn	Asn	Lys	Asn	Tyr	Leu	Val	Trp	Tyr	Leu	Gln	Lys	Pro	Gly	Gln
				35				40				45			
Pro	Pro	Lys	Leu	Leu	Ile	Tyr	Trp	Ala	Ser	Thr	Arg	Glu	Ser	Gly	Val
				50				55			60				
Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr
				65				70			75			80	
Ile	Ser	Ser	Leu	Gln	Ala	Glu	Asp	Val	Ala	Val	Tyr	Tyr	Cys	Gln	Gln
				85				90				95			
Tyr	Tyr	Ser	Ser	Pro	Trp	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile
				100				105			110				
Lys	Arg	Thr	Val	Ala	Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp
				115				120			125				
Glu	Gln	Leu	Lys	Ser	Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn
				130				135			140				
Phe	Tyr	Pro	Arg	Glu	Ala	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	
				145				150			155				

<210> 89

<211> 1335

<212> DNA

<213> Homosapien

<400> 89

caggtccagc	tggtagcagtc	tggggctgag	gtgaagaagc	ctggggcctc	agtgaaggtc	60
tcctgcagg	tttccggata	caccctca	gaattatcca	tgcactgggt	gcgacagact	120
cctggaaaag	ggcttgagtg	gatgggaggt	tttgcacttg	aagatggtga	aacaatctac	180
gcacagaagt	tccaggacag	agtcaccatg	accgaggaca	catctacaga	cacagcctac	240
atggaaactga	gcagcctgag	atctgaggac	acggccgtgt	attactgtgc	aacaaacgtat	300
ttttggactg	gttattatga	ctactggggc	cagggAACCC	tggtcaccgt	ctccctcagcc	360
tccaccaagg	gccccatcggt	cttccccctg	gcgcctgct	ccaggagcac	ctccgagagc	420
acagcggccc	tgggctgcct	ggtcaaggac	tacttccccg	aaccgggtac	ggtgtcgtgg	480
aactcaggcg	ctctgaccag	cggcgtgcac	accttcccag	ctgtcctaca	gtcctcagga	540
ctctactccc	tcagcagcgt	ggtgaccgtg	ccctccagca	acttcggcac	ccagacctac	600
acctgcaacg	tagatcacaa	gccccagcaac	accaagggtgg	acaagacagt	tgagcgc当地	660
tgttgtgtcg	agtgcaccacc	gtgcccagca	ccacctgtgg	caggaccgtc	agtcttcctc	720
ttccccccaa	aacccaagga	caccctcatg	atctcccgga	ccctcgagg	cacgtgcgtg	780
gtgggtggacg	tgagccacga	agaccccgag	gtccagttca	actggta	ggacggcgtg	840
gaggtgcata	atgccaagac	aaagccacgg	gaggagcagt	tcaacagcac	gttccgtgtg	900
gtcagegtcc	tcaccgttgc	gcaccaggac	tggctgaacg	gcaaggagta	caagtgc当地	960
gtctccaaca	aaggcctccc	agccccatc	gagaaaaacca	tctccaaaac	caaagggcag	1020
ccccgagaac	cacagggtta	caccctgccc	ccatccccggg	aggagatgac	caagaaccag	1080
gtcagcctga	cctgcctgtt	caaaggcttc	tacccca	acatcgccgt	ggagtggag	1140
agcaatgggc	agccggagaa	caactacaag	accacaccc	ccatgctgga	ctccgacggc	1200
tccttcttcc	tctacagcaa	gctcaccgtg	gacaagagca	ggtggcagca	ggggAACGTC	1260
ttctctatgt	ccgtgtatgca	tgaggctctg	cacaaccact	acacgcagaa	gaggcctctcc	1320
ctgtctccgg	gtaaaa					1335

<210> 90

<211> 445  
<212> PRT  
<213> Homosapien

<400> 90  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Thr Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
50 55 60  
Gln Asp Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Thr Asn Asp Phe Trp Thr Gly Tyr Asp Tyr Trp Gly Gln Gly  
100 105 110  
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
130 135 140  
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
145 150 155 160  
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
165 170 175  
Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser  
180 185 190  
Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys Pro  
195 200 205  
Ser Asn Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu  
210 215 220  
Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu  
225 230 235 240  
Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu  
245 250 255  
Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln  
260 265 270  
Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys  
275 280 285  
Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu  
290 295 300  
Thr Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys  
305 310 315 320  
Val Ser Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys  
325 330 335  
Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser  
340 345 350  
Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys  
355 360 365  
Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln  
370 375 380  
Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly  
385 390 395 400

Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln
				405					410					415	
Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His	Asn
				420				425					430		
His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly	Lys			
				435			440					445			

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<210> 91
<211> 660
<212> DNA
<213> Homosapien
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<400> 91
gacatcgta tgacccagtc tccagactcc ctggctgtgt ctctggcga gagggccacc 60
atcaactgca agtccagcca gagtgttta tacagctcca acaataagaa ctacttagtt 120
tggtaccaggc agaaaccagg acagccctt aagacgctca tttactggc atctacccgg 180
gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240
atcagcagcc tgcaggctga agatgtgggaa gtttattact gtcaacaata ttatactagt 300
ccgtggacgt tcggccaagg gaccaaggtg gaaatcaagc gaactgtggc tgccacatct 360
gtcttcatct tcccgccatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgcctc 480
caatcggtt actcccaagga gagtgtcaca gagcaggaca gcaaggacag cacctacagc 540
ctcagcagca ccctgacgct gagcaaaagca gactacgaga aacacaaaagt ctacgcctgc 600
gaagtcaccc atcagggcct gagctgcggc gtacaaaaga gcttcaacag gggagagtg 660
```

<210> 92  
<211> 220  
<212> PRT  
<213> Homosapien

<400> 92  
 Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
 1 5 10 15  
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
 20 25 30  
 Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln  
 35 40 45  
 Pro Pro Lys Thr Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val  
 50 55 60  
 Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
 65 70 75 80  
 Ile Ser Ser Leu Gln Ala Glu Asp Val Gly Val Tyr Tyr Cys Gln Gln  
 85 90 95  
 Tyr Tyr Thr Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
 100 105 110  
 Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
 115 120 125  
 Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
 130 135 140  
 Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu  
 145 150 155 160  
 Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp  
 165 170 175

Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr  
                  180                 185                 190  
 Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser  
                  195                 200                 205  
 Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys  
                  210                 215                 220

<210> 93  
 <211> 560  
 <212> DNA  
 <213> Homosapien

<400> 93  
 caggtgcagc tgcaggagtc gggcccagga ctggtaagc cgtcacagac cctgtccctc 60  
 acctgcactg tctctgtgg ctccatcagc agtgggtggtt actactggag ctggatccgc 120  
 cagcacccag ggaagggcct ggagtggatt gggtacatct attacagtgg gaggacctac 180  
 tacaaccctgt ccctcaagag tcgagttatc atatcagtag acacgtctaa gaaccagttc 240  
 tccctgaagc tgacctctgt gactgccgcg gacacggccg tgtattactg tgcgagatca 300  
 tatagcagct cgtccccact ggttcgaccc ctggggccag ggaaccctgg tcaccgtctc 360  
 ctcagcttcc accaagggcc catccgtctt cccctggcg ccctgctcca ggagcacctc 420  
 cgagagcaca gcccctgg gctgcctgtt caaggactac ttccccgaac cggtgacggt 480  
 gtcgtgaaac tcaggcgccc tgaccagcgg cgtcacacc ttcccgctg tcctacagtc 540  
 ctcaggactc tactccctca                                 560

<210> 94  
 <211> 186  
 <212> PRT  
 <213> Homosapien

<400> 94  
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln  
   1              5                 10                 15  
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Gly  
   20             25                 30  
 Gly Tyr Tyr Trp Ser Trp Ile Arg Gln His Pro Gly Lys Gly Leu Glu  
   35             40                 45  
 Trp Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser  
   50             55                 60  
 Leu Lys Ser Arg Val Ile Ile Ser Val Asp Thr Ser Lys Asn Gln Phe  
   65             70                 75                 80  
 Ser Leu Lys Leu Thr Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr  
   85             90                 95  
 Cys Ala Arg Ser Tyr Ser Ser Ser Pro Leu Val Arg Pro Leu Gly  
   100            105                 110  
 Pro Gly Asn Pro Gly His Arg Leu Leu Ser Phe His Gln Gly Pro Ile  
   115            120                 125  
 Arg Leu Pro Pro Gly Ala Leu Leu Gln Glu His Leu Arg Glu His Ser  
   130            135                 140  
 Arg Pro Gly Leu Pro Gly Gln Gly Leu Leu Pro Arg Thr Gly Asp Gly  
   145            150                 155                 160  
 Val Val Glu Leu Arg Arg Pro Asp Gln Arg Arg Ala His Leu Pro Gly  
   165            170                 175  
 Cys Pro Thr Val Leu Arg Thr Leu Leu Pro  
   180            185

<210> 95  
<211> 458  
<212> DNA  
<213> Homosapien

<400> 95  
gacatccaga tgacccagtc tccatccccc ctgtctgcat ctgttaggaga cagagtcacc 60  
atcacttgc gggcaagtca gggcattaga aatgatttag gctggtatca gcagaaacca 120  
gggaaagccc ctaagcgct gatctatgt gcatccagtt tgcaaagtgg ggtcccatca 180  
aggttcagcg gcagtggatc tgggacagaa ttcaactctca caatcagcag cctgcagcct 240  
gaagatttg caacttatta ctgtctacag cataatagtt acccattcac tttcggccct 300  
gggaccaaag tggatataaa acgaactgtg gctgcaccat ctgtcttcat cttcccgcca 360  
tctgtatgagc agttgaaatc tggaaactgtc tctgtgtgt gcctgctgaa taacttctat 420  
cccagagagg ccaaagtaca gtgaaagggtg gataacgc 458

<210> 96  
<211> 152  
<212> PRT  
<213> Homosapien

<400> 96  
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
1 5 10 15  
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
20 25 30  
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
35 40 45  
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
50 55 60  
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
65 70 75 80  
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Phe  
85 90 95  
Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys Arg Thr Val Ala Ala  
100 105 110  
Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly  
115 120 125  
Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala  
130 135 140  
Lys Val Gln Trp Lys Val Asp Asn  
145 150

<210> 97  
<211> 559  
<212> DNA  
<213> Homosapien

<400> 97  
caggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg tttccggata caccctact gaattatcca tgcactgggt gcgacaggct 120  
cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatggta aacaatctac 180  
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacagatcgc 300  
gagtttttga gtggtttattt ctaccactgg ggcagggaa ccctggcac cgtctcctca 360  
gcctccacca agggccatc ggtttcccc ctggccct gctccaggag caccctcgag 420  
agcacagcg ccctggctg cctggtaag gactactcc cagaaccgg gacgggtgtcg 480  
tggaaacttag ggcgtctgac cagcggcgtg cacacccctc cagctgtcct acagtcctca 540  
ggactctact ccctcagca 559

<210> 98  
<211> 186  
<212> PRT  
<213> Homosapien

<400> 98  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Thr Asp Arg Glu Phe Trp Ser Gly Phe Tyr His Trp Gly Gln  
100 105 110  
Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val  
115 120 125  
Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala  
130 135 140  
Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser  
145 150 155 160  
Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val  
165 170 175  
Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser  
180 185

<210> 99  
<211> 491  
<212> DNA  
<213> Homosapien

<400> 99  
gacatcgta tgaccaggc tccagactcc ctggctgtgt ctctggcga gagggccacc 60  
atcaactgca agtccagcca gagtgtttt tacagctcca acaatgagaa cttcttagct 120  
tggtaccaggc agaaaccagg acagcctcct aaactgctca ttactggc atctaccgg 180  
gaatccgggg tcccagaccg cttcagtgcc aggggtctg ggacagatt cactctcacc 240  
atcagcagcc tgcaggctga agatgtggc gtttattact gtcagcaata ttataatagt 300  
ccgtggacgt tcggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgcaccatct 360  
gtcttcatct tcccggcattc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420  
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaaggtgga taacgcctcc 480  
ccaatcggt a 491

<210> 100  
<211> 163  
<212> PRT  
<213> Homosapien

<400> 100  
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
20 25 30  
Ser Asn Asn Glu Asn Phe Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln  
35 40 45  
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val  
50 55 60  
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
65 70 75 80  
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
85 90 95  
Tyr Tyr Asn Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
100 105 110  
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
115 120 125  
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
130 135 140  
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Ser  
145 150 155 160  
Pro Ile Gly

<210> 101  
<211> 543  
<212> DNA  
<213> Homosapien

<400> 101  
caggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg tttccggata caccctcaact gaattatcca tgcactgggt gcgacaggct 120  
cctggaaaag ggcttgagtg gatggggaggt tttgatcctg aagatggtga aacaatctac 180  
gcacagaagt tccaggcgag agtcaccatg accgaggaca catctacaga cacagcctac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacggacgat 300  
ttttggagtg gttatgttga ctactggggc cagggAACCC tggtcacccgt ctccctcagcc 360  
tccaccaagg gccccatcggt cttccccctg gcgcctgtct ccaggagcac ctcccgagac 420  
acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg 480  
aactcaggcg ctctgaccag cggcgtgcac accttcccaag ctgtcctaca gtccctcagga 540  
ctt 543

<210> 102  
<211> 181  
<212> PRT  
<213> Homosapien

<400> 102  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15

```
<210> 103
<211> 491
<212> DNA
<213> Homosapien
```

```
<400> 103
gacatcgta tgacccagtc tccagactcc ctggctgtgt ctctggcga gagggccacc 60
atcaactgca agtccagtca gagtgttta tacaggtcta acaataagag ctacttagtt 120
tggtaccagc agaaaacttagg acagtcctt aagctgctca tttactggc atctacccgg 180
gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240
atcagcagcc tgcaggctga agatgtggca gtttattatt gtcaacaata ttatagttact 300
ccgtggacgt tcggccaagg gaccaaggtg gaaatcaaac gaactgtggc tgccacatct 360
gtcttcatct tcccgccatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgcctc 480
ccaatcggtt a 491
```

<210> 104  
<211> 163  
<212> PRT  
<213> Homosapien

```

<400> 104
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
      1           5           10          15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Arg
      20          25          30
Ser Asn Asn Lys Ser Tyr Leu Val Trp Tyr Gln Gln Lys Leu Gly Gln
      35          40          45
Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
      50          55          60
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr

```

65	70	75	80
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln			
85	90	95	
Tyr Tyr Ser Thr Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile			
100	105	110	
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp			
115	120	125	
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn			
130	135	140	
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu			
145	150	155	160
Pro Ile Gly			

<210> 105  
 <211> 499  
 <212> DNA  
 <213> Homosapien

<400> 105  
 cagggtccagc tggcacatgc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
 tcctgcagg tttccggata caccctact gaattatcca tgcactgggt ggcacaggct 120  
 cctggaaaag ggcttggatg gatggggagg tttgatcctg aagatggtga aacaatctac 180  
 gcacagaatg tccaggccag agtcaccatg accgaggaca catctacaga cacagcctac 240  
 atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacagacat 300  
 ttttggatgt gttatgttga ctactgggc cagggaaacc tggtcaccgt ctccctagcc 360  
 tccaccaagg gcccattcggt cttcccccgt gcgcctgtt ccaggagcac ctccgagagc 420  
 acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg 480  
 aactcaggcg ctctgacca 499

<210> 106  
 <211> 166  
 <212> PRT  
 <213> Homosapien

<400> 106  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
 20 25 30  
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Thr Asp Asp Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly  
 100 105 110  
 Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
 115 120 125  
 Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
 130 135 140

Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
145 150 155 160  
Asn Ser Gly Ala Leu Thr  
165

<210> 107  
<211> 448  
<212> DNA  
<213> Homosapien

<400> 107  
gacatcgta tgacccagtc tccagactcc ctggctgtgt ctctggcga gagggccacc 60  
atcaactgca agtccagcca gagtgtttt aacagctcca acaataagaa ctacttagtt 120  
tggtaccagc agaaaccagg acagcctcct aagctgctca ttactggc atctacccgg 180  
gaatccgggg tccctgaccg attcagtgcc agcgggtctg ggacagattt cactctcacc 240  
atcagcagcc tgcaaggctga agatgtggca gtttattact gtcagcaata ttatagtcct 300  
acgtggacgt tcgccaagg gaccaagggtg gaaatcaaac gaactgtggc tgcaccatct 360  
gtcttcatct tccgcctatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420  
ctgctgaata acttctatcc cagagagg 448

<210> 108  
<211> 149  
<212> PRT  
<213> Homosapien

<400> 108  
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
20 25 30  
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln  
35 40 45  
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val  
50 55 60  
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
65 70 75 80  
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
85 90 95  
Tyr Tyr Ser Pro Thr Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
100 105 110  
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
115 120 125  
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
130 135 140  
Phe Tyr Pro Arg Glu  
145

<210> 109  
<211> 540  
<212> DNA  
<213> Homosapien

<400> 109

caggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg ttccggata caccctcaact gaattatcca tgcactgggt gcgacaggct 120  
cctggaaaag ggctttagtg gatgggaggt ttgatcctg aagatggta aacaatctac 180  
gcacagaagt tccagggcag agtcaccatg accaggacatcatacaga cacagcctac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacggacgat 300  
tttggagtg gttatggta ctactgggc cagggaaacc tggtagccgt ctccctagcc 360  
tccaccaagg gcccattcggt cttccctg gcgcctgct ccaggagcac ctccgagagc 420  
acagcggccc tggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcggt 480  
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga 540

<210> 110  
<211> 180  
<212> PRT  
<213> Homosapien

<400> 110  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Thr Asp Asp Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly  
100 105 110  
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
130 135 140  
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
145 150 155 160  
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
165 170 175  
Gln Ser Ser Gly  
180

<210> 111  
<211> 478  
<212> DNA  
<213> Homosapien

<400> 111  
gacatcgta tgacccagtc tccagactcc ctggctgtgt ctctggcga gagggccacc 60  
atcaactgca agtccagcca gagtgtttt tacagctcca acaataagaa ctacttagct 120  
tggtagccagg agaaaccagg acagcctcct aagctgctca tttactggac atctaccgg 180  
gaatccgggg tccctgaccg attcagtgcc agcgggtctg tgacagatt cactctcacc 240  
atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttatagttct 300  
ccgtggacgt tcggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgcaccatct 360

gtcttcatct tccggccatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420  
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgcct 478

<210> 112  
<211> 159  
<212> PRT  
<213> Homosapien

<400> 112  
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
20 25 30  
Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln  
35 40 45  
Pro Pro Lys Leu Leu Ile Tyr Trp Thr Ser Thr Arg Glu Ser Gly Val  
50 55 60  
Pro Asp Arg Phe Ser Gly Ser Gly Ser Val Thr Asp Phe Thr Leu Thr  
65 70 75 80  
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
85 90 95  
Tyr Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
100 105 110  
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
115 120 125  
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
130 135 140  
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala  
145 150 155

<210> 113  
<211> 542  
<212> DNA  
<213> Homosapien

<400> 113  
caggtccagc tggtagcgtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg ttccggata caccctcagt gaattatcca tgcactgggt gcacaggct 120  
cctggaaaag ggctttagtg gatgggaggt ttgatcctg aagatggtga aacaatctac 180  
gcacagaagt tccaggccag agtcaccatg accaggagaca catctacaga cacagcctac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt tttactgtgc aacaaagagg 300  
gaatatagtg gctactttga ctactggggc cagggAACCC tggtcaccgt ctccctcagcc 360  
tccaccaagg gcccattcggt ctccccctg gcgcctgtc ccaggagcac ctccgagagc 420  
acagcggccc tggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg 480  
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga 540  
ct 542

<210> 114  
<211> 180  
<212> PRT  
<213> Homosapien

<400> 114  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala

1	5	10	15												
Ser	Val	Lys	Val	Ser	Cys	Lys	Val	Ser	Gly	Tyr	Thr	Leu	Ser	Glu	Leu
			20					25					30		
Ser	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Met
			35					40				45			
Gly	Gly	Phe	Asp	Pro	Glu	Asp	Gly	Glu	Thr	Ile	Tyr	Ala	Gln	Lys	Phe
			50				55			60					
Gln	Gly	Arg	Val	Thr	Met	Thr	Glu	Asp	Thr	Ser	Thr	Asp	Thr	Ala	Tyr
			65				70			75			80		
Met	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Phe	Tyr	Cys
			85					90				95			
Ala	Thr	Lys	Arg	Glu	Tyr	Ser	Gly	Tyr	Phe	Asp	Tyr	Trp	Gly	Gln	Gly
			100				105					110			
Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe
			115				120					125			
Pro	Leu	Ala	Pro	Cys	Ser	Arg	Ser	Thr	Ser	Glu	Ser	Thr	Ala	Ala	Leu
			130				135				140				
Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp
			145				150			155			160		
Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu
				165				170				175			
Gln	Ser	Ser	Gly												
			180												

<210> 115  
<211> 477  
<212> DNA  
<213> Homosapien

<400> 115  
gacatcgta tgacccagtc tccagactcc ctggctgtgt ctctggcga gagggccacc 60  
atcaactgca agtccagcca gagtgttta tacagctcca acagtaagaa ctacttagct 120  
tggttccagc agaaaccagg acagcctcct aagctgctca tttactggc atctacccgg 180  
gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240  
atcagccccc tgcaggctga agatgtggca gtttattctt gtcagcaata ttttattact 300  
ccgtggacgt tggccaagg gaccaaggtg gaactcaaac gaactgtggc tgcaccatct 360  
gtcttcatct tccggccatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420  
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaaggtgga taacgcc 477

<210> 116  
<211> 159  
<212> PRT  
<213> Homosapien

<400> 116  
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
20 25 30  
Ser Asn Ser Lys Asn Tyr Leu Ala Trp Phe Gln Gln Lys Pro Gly Gln  
35 40 45  
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val  
50 55 60  
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr

65	70	75	80
Ile Ser Arg Leu Gln Ala Glu Asp Val Ala Val Tyr Ser Cys Gln Gln			
85	90	95	
Tyr Phe Ile Thr Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Leu			
100	105	110	
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp			
115	120	125	
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn			
130	135	140	
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala			
145	150	155	

<210> 117  
<211> 459  
<212> DNA  
<213> Homosapien

<400> 117  
caggtgcagc ctgagcagtc gggccagga ctggtaagc cctcgacac cctctcaactc 60  
acctgtgcca tctccgggaa cagtgtctc agcaacagtg ctgcttggaa ctggatcagg 120  
cagtccccc cggaggccct tgagtggctg ggaaggacat actacaggc caagtggat 180  
agtgtatcatg cagtatctgt gagaagtgcgataaaccatct acccagacac atccaagaac 240  
cagttctccc tgcagctgaa ctctgtgact cccgaggaca cggctgtgta ttactgtgca 300  
agagatcggaa tttagtggac ctatgtcggt atggacgtct gggccaaagg gaccacggc 360  
accgtctccct cagcctccac caagggccca tcggcttcc ccctggcgcc cctgctccag 420  
gagcacctcc gagagcacag cggccctggg ctgcctggc 459

<210> 118  
<211> 153  
<212> PRT  
<213> Homosapien

<400> 118  
Gln Val Gln Pro Glu Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln  
1 5 10 15  
Thr Leu Ser Leu Thr Cys Ala Ile Ser Gly Asp Ser Val Ser Ser Asn  
20 25 30  
Ser Ala Ala Trp Asn Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu  
35 40 45  
Trp Leu Gly Arg Thr Tyr Arg Ser Lys Trp Tyr Ser Asp His Ala  
50 55 60  
Val Ser Val Arg Ser Arg Ile Thr Ile Tyr Pro Asp Thr Ser Lys Asn  
65 70 75 80  
Gln Phe Ser Leu Gln Leu Asn Ser Val Thr Pro Glu Asp Thr Ala Val  
85 90 95  
Tyr Tyr Cys Ala Arg Asp Arg Ile Ser Gly Thr Tyr Val Gly Met Asp  
100 105 110  
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Ala Ser Thr Lys  
115 120 125  
Gly Pro Ser Val Phe Pro Leu Ala Pro Leu Leu Gln Glu His Leu Arg  
130 135 140  
Glu His Ser Gly Pro Gly Leu Pro Gly  
145 150

<210> 119  
<211> 526  
<212> DNA  
<213> Homosapien

<400> 119  
ccagctcagc tcctgggct gctaatgctc tgggtccctg gatccaatga ggatattgtg 60  
atgaccaga ctccactctc cctgcccgtc acccctggag agccggcctc catctcctgc 120  
aggcttagtc agagcctctt ggatagtgat gatggaaaca cctatttga ctggtacctg 180  
cagaagccag ggcagtctcc acagctcctg atctatacgc tttccttgc ggctctgga 240  
gtcccagaca ggttcagtgg cagtgggtca ggcactgatt tcacactgac aatcagcagg 300  
gtggaggctg aggatgttgg agtttattac tgcatgcaac gtatagagtt tcctctact 360  
ttcggcggag ggaccaaggt ggagatcaaa cgaactgtgg ctgcaccatc tgtcttcattc 420  
ttccgcacat ctgatgagca gttaaatct ggaactgcct ctgttgtgtg cctgctgaat 480  
aacttctatc ccagagaggc caaagtacag tggaaagggttgg ataacg 526

<210> 120  
<211> 175  
<212> PRT  
<213> Homosapien

<400> 120  
Pro Ala Gln Leu Leu Gly Leu Leu Met Leu Trp Val Pro Gly Ser Asn  
1 5 10 15  
Glu Asp Ile Val Met Thr Gln Thr Pro Leu Ser Leu Pro Val Thr Pro  
20 25 30  
Gly Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu Asp  
35 40 45  
Ser Asp Asp Gly Asn Thr Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly  
50 55 60  
Gln Ser Pro Gln Leu Leu Ile Tyr Thr Leu Ser Phe Arg Ala Ser Gly  
65 70 75 80  
Val Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu  
85 90 95  
Thr Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met  
100 105 110  
Gln Arg Ile Glu Phe Pro Leu Thr Phe Gly Gly Thr Lys Val Glu  
115 120 125  
Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser  
130 135 140  
Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn  
145 150 155 160  
Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn  
165 170 175

<210> 121  
<211> 499  
<212> DNA  
<213> Homosapien

<400> 121  
caggtccagg tggcacagtc tggggctgag gtgaagaacc ctggggcctc agtgaaggctc 60  
tcctgcaagg tttccggatc caccctcaact gaattatcca tgcactgggt gcgacaggct 120

cctggaaaag ggctttagtg gatgggaggt tttgatcctg aagatggtga aacaatctac 180  
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagtctac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aaccaacgt 300  
ttttggagtg gttatgttgc ctactggggc cagggAACCC tggtcaccgt ctcctcagcc 360  
tccaccaagg gcccatcggt ctccccctg gcgcctgtct ccaggagcac ctccgagagc 420  
acagcggccc tggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg 480  
aactcaggcg ctctgacca 499

<210> 122  
<211> 166  
<212> PRT  
<213> Homosapien

<400> 122  
Gln Val Gln Val Val Gln Ser Gly Ala Glu Val Lys Asn Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Ser Thr Leu Thr Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Val Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Thr Asn Asp Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly  
100 105 110  
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
130 135 140  
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
145 150 155 160  
Asn Ser Gly Ala Leu Thr  
165

<210> 123  
<211> 536  
<212> DNA  
<213> Homosapien

<400> 123  
caggcttca tttctctgtt gctctggatc tctgatgtct atggggacat cgtgatgacc 60  
cagtcctcag actccctggc tggcgtctcg ggcggagggg ccaccatcac ctgcaagtcc 120  
agccagactg ttttatacag ctccaaacaat aagaactact tagtttggta tcagcagaaa 180  
tcaggacagc ctcctaaagct gtcattcac tggcatcta tccggaaatc cgggtccct 240  
gaccgatca gtggcagcgg gtctggaca gatttcacgc tcaccatcac cagcctgcag 300  
gctgaagatg tggcagtttta ttactgtcag caatattata gtagtccgtg gacgttcggc 360  
caagggacca aggtggaaat caaacgaact gtggctgcac catctgtctt catctccccg 420  
ccatctgtatg agcagttgaa atctggaaact gcctctgtt gttgcctgtct gaataacttc 480  
tatcccaagag agggcaaaatg acagtggaaatg gtggataacg cccttccaaat cgggtta 536

<210> 124

<211> 178  
<212> PRT  
<213> Homosapien

<400> 124  
Gln Val Phe Ile Ser Leu Leu Leu Trp Ile Ser Asp Val Tyr Gly Asp  
1 5 10 15  
Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu  
20 25 30  
Arg Ala Thr Ile Thr Cys Lys Ser Ser Gln Thr Val Leu Tyr Ser Ser  
35 40 45  
Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Ser Gly Gln Pro  
50 55 60  
Pro Lys Leu Leu Ile His Trp Ala Ser Ile Arg Glu Ser Gly Val Pro  
65 70 75 80  
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile  
85 90 95  
Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr  
100 105 110  
Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys  
115 120 125  
Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu  
130 135 140  
Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe  
145 150 155 160  
Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Pro  
165 170 175  
Ile Gly

<210> 125  
<211> 414  
<212> DNA  
<213> Homosapien

<400> 125  
caggtgcagg ctgagcagtc gggtccagga ctggtaagc cctcgacagac cctctcactc 60  
acctgtgcca tctccggga cagtgtctct agctacagtg ctgcttggaa ctggatcagg 120  
cagtccctt cgagaggcct tgagtggctg ggaaggacat actacaggc 180  
agtgtatcatg cagtatctgt gagaagtgcgataaaccatct acccagacac atccaagaac 240  
cagttctccc tgcagctgaa ctctgtgact cccgaggaca cggctgtgta ttactgtgca 300  
agagatcggaa ttagtggac ctatgtcggt atggacgtct gggcccaagg gaccacggc 360  
accgtctcct cagcctccac caaggcccc atcggttttc cccctggccc cctc 414

<210> 126  
<211> 138  
<212> PRT  
<213> Homosapien

<400> 126  
Gln Val Gln Ala Glu Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln  
1 5 10 15  
Thr Leu Ser Leu Thr Cys Ala Ile Ser Gly Asp Ser Val Ser Ser Tyr  
20 25 30

Ser Ala Ala Trp Asn Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu  
 35 40 45  
 Trp Leu Gly Arg Thr Tyr Tyr Arg Ser Lys Trp Tyr Ser Asp His Ala  
 50 55 60  
 Val Ser Val Arg Ser Arg Ile Thr Ile Tyr Pro Asp Thr Ser Lys Asn  
 65 70 75 80  
 Gln Phe Ser Leu Gln Leu Asn Ser Val Thr Pro Glu Asp Thr Ala Val  
 85 90 95  
 Tyr Tyr Cys Ala Arg Asp Arg Ile Ser Gly Thr Tyr Val Gly Met Asp  
 100 105 110  
 Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Ala Ser Thr Lys  
 115 120 125  
 Gly Pro Ile Gly Leu Pro Pro Gly Pro Leu  
 130 135

<210> 127  
 <211> 514  
 <212> DNA  
 <213> Homosapien

<400> 127  
 gtcttcattt ctctgttgct ctggatctct ggtgcctacg gggacatcgt gatgacccag 60  
 tctccagact ccctggctgt gtctctgggc gagagggcca ccatcaactg caagtccagc 120  
 cagagtgtt tatacagttc caacaataag aactacatag tttggtacca gcagaaaacca 180  
 gggcagcctc ctaagttgct catttactgg acatctaccc ggaaatccgg ggtccctgac 240  
 cgattcagtg gcagcgggtc tggaacagat ttcaactctca ctatcagtag cctgcaggct 300  
 gaagatgtgg cagtttatta ctgtcagcaa tatttttagtt ctccgtggac gttcggccaa 360  
 gggaccaaag tggacatcaa acgaactgtg gctgcaccat ctgtcttcat cttcccgcca 420  
 tctgatgagc agttgaaatc tggaactgccc tctgttggt gcctgctgaa taacttcat 480  
 cccagagagg ccaaagtaca gtgaaagggtg gata 514

<210> 128  
 <211> 171  
 <212> PRT  
 <213> Homosapien

<400> 128  
 Val Phe Ile Ser Leu Leu Leu Trp Ile Ser Gly Ala Tyr Gly Asp Ile  
 1 5 10 15  
 Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu Arg  
 20 25 30  
 Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser Ser Asn  
 35 40 45  
 Asn Lys Asn Tyr Ile Val Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro  
 50 55 60  
 Lys Leu Leu Ile Tyr Trp Thr Ser Thr Arg Glu Ser Gly Val Pro Asp  
 65 70 75 80  
 Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser  
 85 90 95  
 Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr Phe  
 100 105 110  
 Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Asp Ile Lys Arg  
 115 120 125  
 Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln

130	135	140
Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu	Asn Asn Phe Tyr	
145	150	155
Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp		160
165	170	

<210> 129  
<211> 444  
<212> DNA  
<213> Homosapien

<400> 129  
cagtcgggtc caggactggt gaagccctcg cagaccctct cactcacctg tgccatctcc 60  
ggggacagtg tctctagcaa cagtgtctg tggaaactgga tcagggcagtc cccttcgaga 120  
ggccttgagt ggctggaaag gacatactac aggtccaagt ggtatagtga tcatgcagta 180  
tctgtgagaa gtcgaataac catctaccca gacacatcca agaaccagt ctcctgcag 240  
ctgaactctg tgactcccga ggacacggct gtgtattact gtgcaagaga tcggattagt 300  
gggacctatg tcggtatgga cgtctgggc caagggacca cggtcaccgt ctccctcagcc 360  
tccaccaagg gcccatcggt ctccccctg gcgcctcgc tccaggagca cctccgagag 420  
cacagcggcc ctgggctgcc tggc 444

<210> 130  
<211> 148  
<212> PRT  
<213> Homosapien

<400> 130  
Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln Thr Leu Ser Leu Thr  
1 5 10 15  
Cys Ala Ile Ser Gly Asp Ser Val Ser Ser Asn Ser Ala Ala Trp Asn  
20 25 30  
Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu Trp Leu Gly Arg Thr  
35 40 45  
Tyr Tyr Arg Ser Lys Trp Tyr Ser Asp His Ala Val Ser Val Arg Ser  
50 55 60  
Arg Ile Thr Ile Tyr Pro Asp Thr Ser Lys Asn Gln Phe Ser Leu Gln  
65 70 75 80  
Leu Asn Ser Val Thr Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg  
85 90 95  
Asp Arg Ile Ser Gly Thr Tyr Val Gly Met Asp Val Trp Gly Gln Gly  
100 105 110  
Thr Thr Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Leu Leu Gln Glu His Leu Arg Glu His Ser Gly Pro  
130 135 140  
Gly Leu Pro Gly  
145

<210> 131  
<211> 505  
<212> DNA  
<213> Homosapien

<400> 131

gggctgctaa tgctctggat acctggatcc agtgcagata ttgggatgac ccagactcca 60  
ctctctctgt ccgtcaccct tggacagccg gcctccatct cctgtaagtc tagtcagagc 120  
ctcctgtata gtgatggaaa gacctattt tattggtacc tgcagaagcc aggccagcct 180  
ccacaacacc tcatctatga agtttccaaac cggttctctg gagtgccaga taggttcagt 240  
ggcagcgggt ctgggacaga tttcacactg aaaatcagcc gggtgagggc tgatgatgtt 300  
ggggtttatt actgcatgca aactatacac cttccgctca ctttcggcgg agggaccaag 360  
gtggagatcc aacgaactgt ggctgcacca tctgtcttca tcttccgccc atctgatgag 420  
cagttgaaat ctgaaactgc ctctgttgc tgcctgctga ataacttcta tccagagag 480  
gccaaggatc agtggaaagggt ggata 505

<210> 132

<211> 168

<212> PRT

<213> Homosapien

<400> 132

Gly Leu Leu Met Leu Trp Ile Pro Gly Ser Ser Ala Asp Ile Gly Met  
1 5 10 15  
Thr Gln Thr Pro Leu Ser Leu Ser Val Thr Pro Gly Gln Pro Ala Ser  
20 25 30  
Ile Ser Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser Asp Gly Lys Thr  
35 40 45  
Tyr Leu Tyr Trp Tyr Leu Gln Lys Pro Gly Gln Pro Pro Gln His Leu  
50 55 60  
Ile Tyr Glu Val Ser Asn Arg Phe Ser Gly Val Pro Asp Arg Phe Ser  
65 70 75 80  
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu  
85 90 95  
Ala Asp Asp Val Gly Val Tyr Tyr Cys Met Gln Thr Ile His Leu Pro  
100 105 110  
Leu Thr Phe Gly Gly Thr Lys Val Glu Ile Gln Arg Thr Val Ala  
115 120 125  
Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser  
130 135 140  
Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu  
145 150 155 160  
Ala Lys Val Gln Trp Lys Val Asp  
165

<210> 133

<211> 447

<212> DNA

<213> Homosapien

<400> 133

gagcagtccgg gtccaggact ggtgaaggccc tcgcagaccc tctcaactcac ctgtgccatc 60  
tccggggaca gtgtctctag caacagtgtc gcttggaaact ggatcaggca gtcccccctcg 120  
agaggccttg agtggctggg aaggacatac tacaggtcca agtggatag tgatcatgca 180  
gtatctgtga gaagtgcata aaccatctac ccagacacat ccaagaacca gttctccctg 240  
cagctgaact ctgtgactcc cgaggacacg gctgtgtatt actgtgcaag agatcggatt 300  
agtgggaccc atgtcggtat ggacgtctgg ggccaaggga ccacggtcac cgtctccctca 360  
gcctccacca agggcccatc ggtcttcccc ctggcgcccc tgctccagga gcaccccgaa 420  
gagcacagcg gccctggct gcctggc 447

<210> 134  
<211> 149  
<212> PRT  
<213> Homosapien

<400> 134  
Glu Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln Thr Leu Ser Leu  
1 5 10 15  
Thr Cys Ala Ile Ser Gly Asp Ser Val Ser Ser Asn Ser Ala Ala Trp  
20 25 30  
Asn Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu Trp Leu Gly Arg  
35 40 45  
Thr Tyr Tyr Arg Ser Lys Trp Tyr Ser Asp His Ala Val Ser Val Arg  
50 55 60  
Ser Arg Ile Thr Ile Tyr Pro Asp Thr Ser Lys Asn Gln Phe Ser Leu  
65 70 75 80  
Gln Leu Asn Ser Val Thr Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala  
85 90 95  
Arg Asp Arg Ile Ser Gly Thr Tyr Val Gly Met Asp Val Trp Gly Gln  
100 105 110  
Gly Thr Thr Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val  
115 120 125  
Phe Pro Leu Ala Pro Leu Leu Gln Glu His Leu Arg Glu His Ser Gly  
130 135 140  
Pro Gly Leu Pro Gly  
145

<210> 135  
<211> 520  
<212> DNA  
<213> Homosapien

<400> 135  
caggtcttca tttctctgtt gctctggatc tctgggcct acggggacat cgtgatgacc 60  
cagtctccag actccctggc tgtgtctctg ggcgagaggg ccgccatcaa ctgcaagtcc 120  
agccagactg ttttatacag ctccaacaat aagaactact tggtttggta ccagcagaaa 180  
ccaggacagc ctcccaagct gtcatttac tggcatcta cccgggaatc cggggtccct 240  
gaccgatcca gtggcagcgg gtctggaca gattcactc tcaccatcag cagcctgcag 300  
gctgaagatg tggcagtttta ttactgtcaa caatattata aaagtccgtg gacgttcggc 360  
caagggacca aggtggaaat caaacgaact gtggctgcac catctgtctt catcttcccg 420  
ccatctgtatc agcagttgaa atcttggact gcctctgtt tgcctgtctt gatataacttc 480  
tatcccgatc aggcggaaatc acagtggaaatc gtggataacg 520

<210> 136  
<211> 173  
<212> PRT  
<213> Homosapien

<400> 136  
Gln Val Phe Ile Ser Leu Leu Leu Trp Ile Ser Gly Ala Tyr Gly Asp  
1 5 10 15  
Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu  
20 25 30

Arg Ala Ala Ile Asn Cys Lys Ser Ser Gln Thr Val Leu Tyr Ser Ser  
 35 40 45  
 Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln Pro  
 50 55 60  
 Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val Pro  
 65 70 75 80  
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile  
 85 90 95  
 Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr  
 100 105 110  
 Tyr Lys Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys  
 115 120 125  
 Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu  
 130 135 140  
 Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe  
 145 150 155 160  
 Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn  
 165 170

<210> 137

<211> 490

<212> DNA

<213> Homosapien

<400> 137

caggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
 tcctgcaagg tttccggata caccctcaact gaattatcca tgcactgggt gcgacaggct 120  
 cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aaaatggtga aacaatccac 180  
 gcacagaagt tccagggcag agtcatcatg accgaggaca catctacaga cacagcctac 240  
 atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacagatcag 300  
 ggtggatata gtggctactt tgactgctgg ggccaggaa ccctggtcac cgtctccctca 360  
 gcttccacca agggcccatc cgtctccccc ctggcgcctc gctccaggag caccctccgag 420  
 agcacagccg ccctgggctg cctggtaag gactacttcc ccgaaccggc gacgggtgtcg 480  
 tggactcag 490

<210> 138

<211> 163

<212> PRT

<213> Homosapien

<400> 138

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
 20 25 30  
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Gly Phe Asp Pro Glu Asn Gly Glu Thr Ile His Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Ile Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Thr Asp Gln Gly Gly Tyr Ser Gly Tyr Phe Asp Cys Trp Gly Gln

100	105	110
Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val		
115	120	125
Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala		
130	135	140
Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser		
145	150	155
Trp Asn Ser		

<210> 139  
<211> 540  
<212> DNA  
<213> Homosapien

<400> 139  
agacccagg ttcatttct ctgttgctct ggatctctgg tgcctacggg gacatcgta 60  
tgacccagtc tccagactcc ctggctgtgt ctctgggcga gaggggcacc atcaactgca 120  
agtccagcca gagtatttta tacagctcca ataataagaa ttattttagtt tggtaccagc 180  
agaaaaccagg acagcctcct aagttgctca ttactgggc atctaccggg gaatccgggg 240  
tccctgaccg attcagtggc agcgggtctg ggacagatt cactctcacc atcagcagcc 300  
tgcaggctga agatgtggca gtttattact gtcagcaata ttatagtagt cctccgacgt 360  
tcggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgaccatct gtcttcatct 420  
tcccgcacatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc ctgctgaata 480  
acttctatcc cagagaggcc aaagtacagt ggaaggtgga taacgcctc caatcggtta 540

<210> 140  
<211> 179  
<212> PRT  
<213> Homosapien

<400> 140  
Thr Gln.Val Phe Ile Ser Leu Leu Trp Ile Ser Gly Ala Tyr Gly  
1 5 10 15  
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
20 25 30  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Ile Leu Tyr Ser  
35 40 45  
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln  
50 55 60  
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val  
65 70 75 80  
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
85 90 95  
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
100 105 110  
Tyr Tyr Ser Ser Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
115 120 125  
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
130 135 140  
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
145 150 155 160  
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu

165  
Gln Ser Gly

170

175

<210> 141  
<211> 518  
<212> DNA  
<213> Homosapien

<400> 141  
accatggagt ggacctggag ggtcctttc ttggtggcag cagctacagg caccacgccc 60  
cagggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaagggtc 120  
tcctgcaagg tttccggata caccctcaact gaattatcca tgcactgggt ggcacagggt 180  
cctggaaaag ggcttgagtg gatggggaggt tttgatcctg aagatggtga aacaatctac 240  
gcacagaagt tccaggcag agtcaccatg accgaggaca catctacaga cacagcctac 300  
atggagctga gtagccttag aactgaggac acggccgtgt attactgtac aacggacgat 360  
ttttggagtg gttatggta ctactggggc cagggaaacc tggtcaccgt ctccctcagcc 420  
tccaccaagg gcccattcggt cttcccccctg gcgcctgtgt ccaggagcac ctccgagagc 480  
acagcggcct gggctgcctg gtcaaggact acttcccc 518

<210> 142  
<211> 172  
<212> PRT  
<213> Homosapien

<400> 142  
Thr Met Glu Trp Thr Trp Arg Val Leu Phe Leu Val Ala Ala Ala Thr  
1 5 10 15  
Gly Thr His Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys  
20 25 30  
Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr  
35 40 45  
Leu Thr Glu Leu Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly  
50 55 60  
Leu Glu Trp Met Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr  
65 70 75 80  
Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr  
85 90 95  
Asp Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Thr Glu Asp Thr Ala  
100 105 110  
Val Tyr Tyr Cys Thr Thr Asp Asp Phe Trp Ser Gly Tyr Phe Asp Tyr  
115 120 125  
Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly  
130 135 140  
Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser  
145 150 155 160  
Thr Ala Ala Trp Ala Ala Trp Ser Arg Thr Thr Ser  
165 170

<210> 143  
<211> 519  
<212> DNA  
<213> Homosapien

<400> 143

caggctctca ttctctgtt gctctggatc tctgggcct acggggacat cgtgatgacc 60  
cagtctccag actccctggc tggctctgtt ggcgagaggg ccaccatcaa ctgcaagtcc 120  
agccagagtc tttatacag ctccaaaaat aagaactatt tagtttggta ccagcagaaa 180  
ccaggacagc ctccaaagct gtcattaaac tggcatcta cccgggaatc cggggccct 240  
gaccgattca gtggcagcgg gtctggaca gatttcactc tcaccatcag cagcctgcag 300  
gctgaagatg tggcagtttta ttactgtcag caatattata gttctccgtg gacggtcggc 360  
caagggacca aggtggaaat caaacgaact gtgctgcac catctgtt catctcccg 420  
ccatctgatg agcagttgaa atcttggact gcctctgtt tggcctgct gaataacttc 480  
tatcccagag aggcaagta cagttggagg tggatacgc 519

<210> 144

<211> 173

<212> PRT

<213> Homosapien

<400> 144

Gln Val Phe Ile Ser Leu Leu Leu Trp Ile Ser Gly Ala Tyr Gly Asp  
1 5 10 15  
Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu  
20 25 30  
Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser Ser  
35 40 45  
Lys Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln Pro  
50 55 60  
Pro Lys Leu Leu Ile Asn Trp Ala Ser Thr Arg Glu Ser Gly Val Pro  
65 70 75 80  
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile  
85 90 95  
Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr  
100 105 110  
Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys  
115 120 125  
Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu  
130 135 140  
Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe  
145 150 155 160  
Tyr Pro Arg Glu Ala Lys Tyr Ser Gly Arg Trp Ile Arg  
165 170

<210> 145

<211> 436

<212> DNA

<213> Homosapien

<400> 145

gagcagtcgg ggggaggcgt ggtccagcct gggaggtccc tgagactctc ctgtgcagcg 60  
tctggattca ctttcgttag ctatggcatg cactgggtcc gccaggctcc agccaagggg 120  
ctggagtggtt tggcagttat atggtatgtt gaaataata aataactatgc agactccgtg 180  
aaggggccat tcaccatctc cagagacact tccaaagaaca cgctgtatct gaaatgaac 240  
agcctgagag ccgaggacac ggctgttat tactgtgcga gagatagcag ctctactac 300  
tactacggtt tggacgtctg gggccaagggg accacggta ccgtctcctc agctccacc 360  
aaggggccat cggtttcccc cctggcggcc tggccagga gcaccccgaa gagcacagcg 420

gccctgggct gcctgg

436

<210> 146

<211> 145

<212> PRT

<213> Homosapien

<400> 146

Glu Gln Ser Gly Gly Val Val Gln Pro Gly Arg Ser Leu Arg Leu  
1 5 10 15  
Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr Gly Met His Trp  
20 25 30  
Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ala Val Ile Trp  
35 40 45  
Tyr Asp Gly Asn Asn Lys Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe  
50 . 55 60  
Thr Ile Ser Arg Asp Thr Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn  
65 70 75 80  
Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Asp Ser  
85 90 95  
Ser Ser Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr  
100 105 110  
Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu  
115 120 125  
Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys  
130 135 140  
Leu  
145

<210> 147

<211> 428

<212> DNA

<213> Homosapien

<400> 147

gctccgctac ttctcaccct cctcgctcac tgcacaggtt cttggccaa ttttatgctg 60  
actcagcccc actctgtgtc ggagtctccg gggaaagacgg taaccatctc ctgcacccgc 120  
agcagtggca gcattgccag caactatgtg cagtggttcc agcagcgcgg gggcagttcc 180  
cccaccactg taatctatga ggatgaccaa agaccctctg gggtccctga tcgttctgt 240  
ggctccatcg acagctcctc caactctgcc tccctcacca tctctggact gaggactgag 300  
gacgaggctg actactactg tcagtcttat gatagcagca atcatgtggt attcggcgga 360  
gggaccaagc tgaccgtcct aggtcagccc aaggctgccc cctcggtcac tctgttcccg 420  
ccctccctc 428

<210> 148

<211> 142

<212> PRT

<213> Homosapien

<400> 148

Ala Pro Leu Leu Leu Thr Leu Leu Ala His Cys Thr Gly Ser Trp Ala  
1 5 10 15  
Asn Phe Met Leu Thr Gln Pro His Ser Val Ser Glu Ser Pro Gly Lys  
20 25 30

Thr	Val	Thr	Ile	Ser	Cys	Thr	Arg	Ser	Ser	Gly	Ser	Ile	Ala	Ser	Asn
35						40						45			
Tyr	Val	Gln	Trp	Phe	Gln	Gln	Arg	Pro	Gly	Ser	Ser	Pro	Thr	Thr	Val
50						55						60			
Ile	Tyr	Glu	Asp	Asp	Gln	Arg	Pro	Ser	Gly	Val	Pro	Asp	Arg	Phe	Cys
65						70						75			80
Gly	Ser	Ile	Asp	Ser	Ser	Ser	Asn	Ser	Ala	Ser	Leu	Thr	Ile	Ser	Gly
						85					90			95	
Leu	Arg	Thr	Glu	Asp	Glu	Ala	Asp	Tyr	Tyr	Cys	Gln	Ser	Tyr	Asp	Ser
						100					105			110	
Ser	Asn	His	Val	Val	Phe	Gly	Gly	Thr	Lys	Leu	Thr	Val	Leu	Gly	
						115					120			125	
Gln	Pro	Lys	Ala	Ala	Pro	Ser	Val	Thr	Leu	Phe	Pro	Pro	Ser		
						130					135			140	

<210> 149

<211> 76

<212> PRT

<213> Homosapien

<400> 149

Gln	Pro	Asp	Ala	Ile	Asn	Ala	Pro	Val	Thr	Cys	Cys	Tyr	Asn	Phe	Thr
1				5					10				15		
Asn	Arg	Lys	Ile	Ser	Val	Gln	Arg	Leu	Ala	Ser	Tyr	Arg	Arg	Ile	Thr
								20		25			30		
Ser	Ser	Lys	Cys	Pro	Lys	Glu	Ala	Val	Ile	Phe	Lys	Thr	Ile	Val	Ala
								35		40			45		
Lys	Glu	Ile	Cys	Ala	Asp	Pro	Lys	Gln	Lys	Trp	Val	Gln	Asp	Ser	Met
								50		55			60		
Asp	His	Leu	Asp	Lys	Gln	Thr	Gln	Thr	Pro	Lys	Thr				
						65					70			75	